TEXA EDU

TEXAEDU TRAINING PROGRAMME 2022

TRAINING PROGRAMME

Technology is changing rapidly and diagnostic tools are now an integral part of the repair and maintenance of modern vehicle systems.

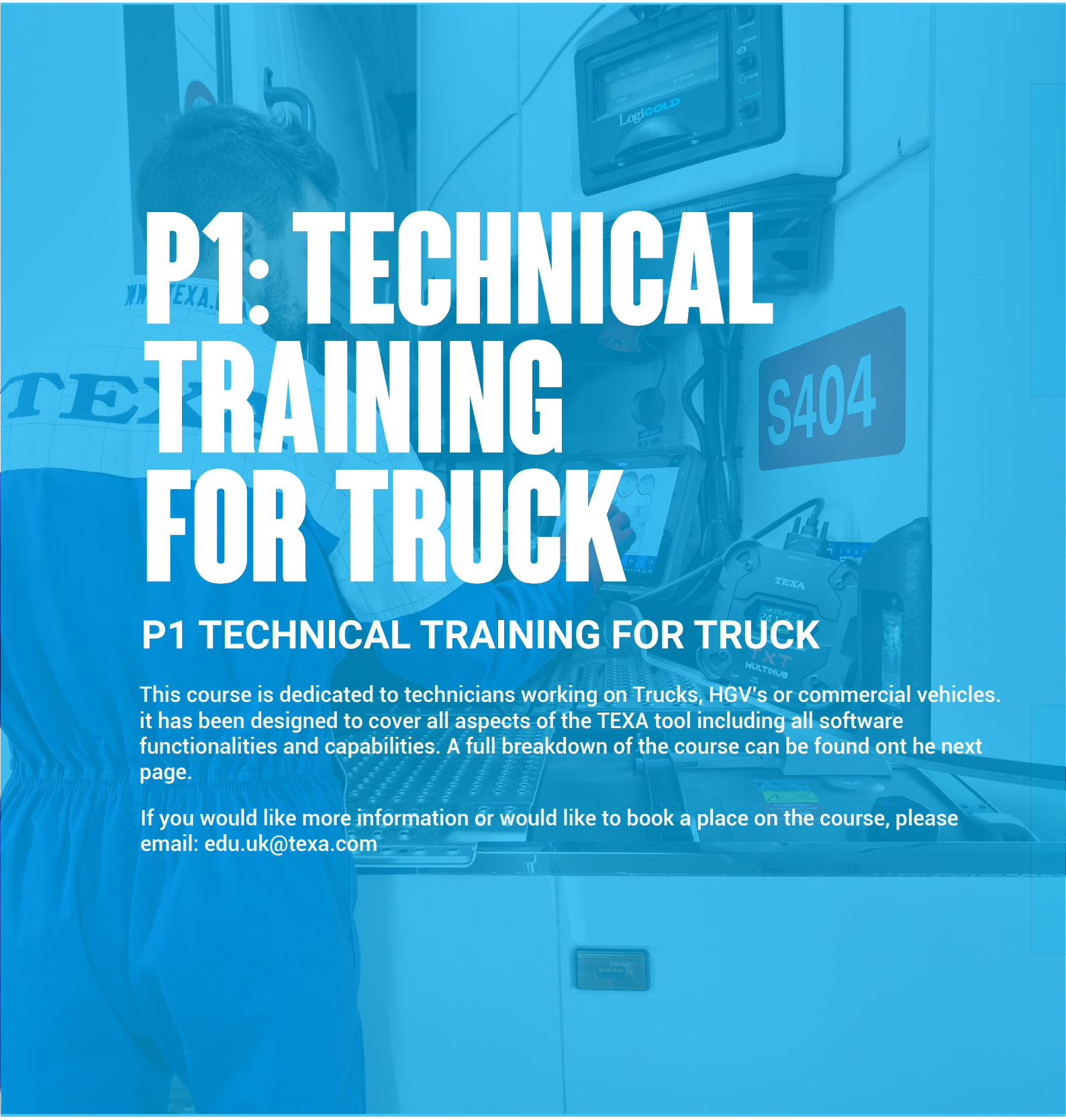
The TEXAEDU UK Training Facilities use the latest presentation technology to ensure each candidate receives the best possible training experience. This allows practical testing throughout the course and direct interaction between the candidate, tool and systems.

Each course has a maximum number of candidates per course, this is put in place to guarantee the best level of interaction between the trainer and trainees. Each course involves a final test with a set pass mark to ensure that the candidate has understood and learnt from the course content.

IMI INSTITUTE OF THE MOTOR INDUSTRY

All of our training courses are IMI accredited.
All courses are Professional Achievement Certificates and give the candidate the opportunity to become a member of the IMI.

CONTENTS



P1: TECHNICAL TRAINING FOR TRUCK

P1 TECHNICAL TRAINING FOR TRUCK

This course is dedicated to technicians working on Trucks, HGV's or commercial vehicles. it has been designed to cover all aspects of the TEXA tool including all software functionalities and capabilities. A full breakdown of the course can be found ont he next page.

If you would like more information or would like to book a place on the course, please email: edu.uk@texa.com

THEORY

- 1st level diagnosis using dashboard and blink codes.
- 2nd level diagnosis.
- Euro emission standards, how manufacturers have achieved these standards by using EGR, AdBlue/SCR systems, Common rail and Diesel particulate filters.
- TEXA IDC5 Software.
- IDC5 desktop and settings.
- Software updates.
- Navigator TXTs firmware update.
- Settings menu.
- Utilities, software license, subscription checks, etc.
- Automatic configuration to pair up the TEXA Bluetooth devices.
- Vehicle and system selection.
- Cable selection.
- 1st level diagnosis using dashboard and blink codes (vehicle specific).
- Menu Parameters, Faults, Status, ECU info, Activations and Settings.

THEORY & PRACTICAL

- Web access and special functions.
- Wiring diagrams, technical data, engine data torque settings, wheel alignment, etc.
- ECU configuration.
- ECU replacement, configuration and exchange manager functions.
- TGS3 global scan.
- Vehicle maintenance and service light reset.
- Serial diagnosis on a range of vehicles.
- Activations, short cut, settings and adjustments short cut.
- Software security levels including Special Code.
- Technical information (within the IDC5 software).

PRACTICAL DAY 2

- Serial diagnosis - Practical (Workshop).
- Settings and adjustments, short cuts, tools and utility menus including saving vehicle fault codes to fleet number and parameter data recording.
- TGS3 global scan.
- ECU replacement, configuration and exchange manager functions.
- Serial diagnosis on a range of vehicles.
- Interpretation of data.
- Testing procedures demonstration.

P1: TECHNICAL TRAINING FOR CAR

P1 TECHNICAL TRAINING FOR CAR

This course is dedicated to technicians working on Cars & Light Commercial vehicles. It has been designed to cover all aspects of the TEXA tool including all software functionalities and capabilities. A full breakdown of the course can be found ont he next page.

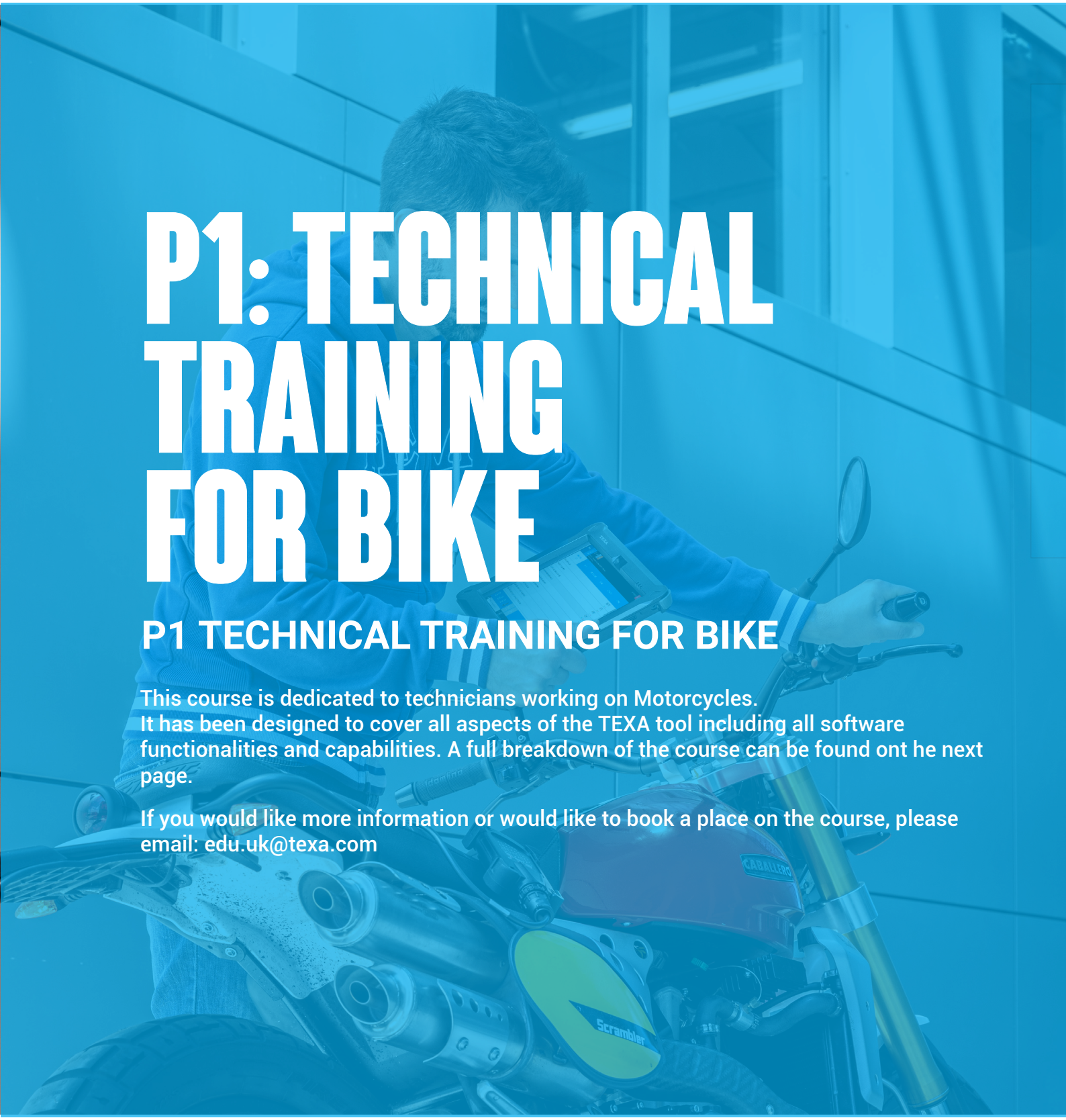
If you would like more information or would like to book a place on the course, please email: edu.uk@texa.com

THEORY

- Introduction to diagnostic functions and resources.
- 1st level diagnostics.
- 2nd level diagnostics.
- Can network overview.
- TEXA IDC5 software.
- IDC5 desktop and settings.
- Software updates/activation interface firmware update.
- Automatic configuration to pair up TEXA Bluetooth devices.
- Vehicle and system selection.
- VIN Scan/TGS3s global scan.
- Parameters/Status.
- Faults.
- ECU info.
- Activations.
- Settings.
- Serial diagnosis.
- Cable selection.
- ECU replacement.
- Technical information.
- Vehicle maintenance and service light reset.
- Activations short cut.
- Settings and adjustments short cut.
- Wiring diagrams.
- Technical data, engine data torque, settings, wheel alignment etc.
- Tools and utility menu including saving vehicle fault codes to registration number in customer management and parameter data recording.
- Diagnostic best practise

PRACTICAL

- Serial diagnosis.
- Activations.
- Tools and utility menu including saving vehicle fault codes to registration number in customer management and parameter data recording.
- ECU replacement (use of TEXA Exchange Manager data saving/loading feature).
- Record and road test functions.



P1: TECHNICAL TRAINING FOR BIKE

P1 TECHNICAL TRAINING FOR BIKE

This course is dedicated to technicians working on Motorcycles.
It has been designed to cover all aspects of the TEXA tool including all software functionalities and capabilities. A full breakdown of the course can be found ont he next page.

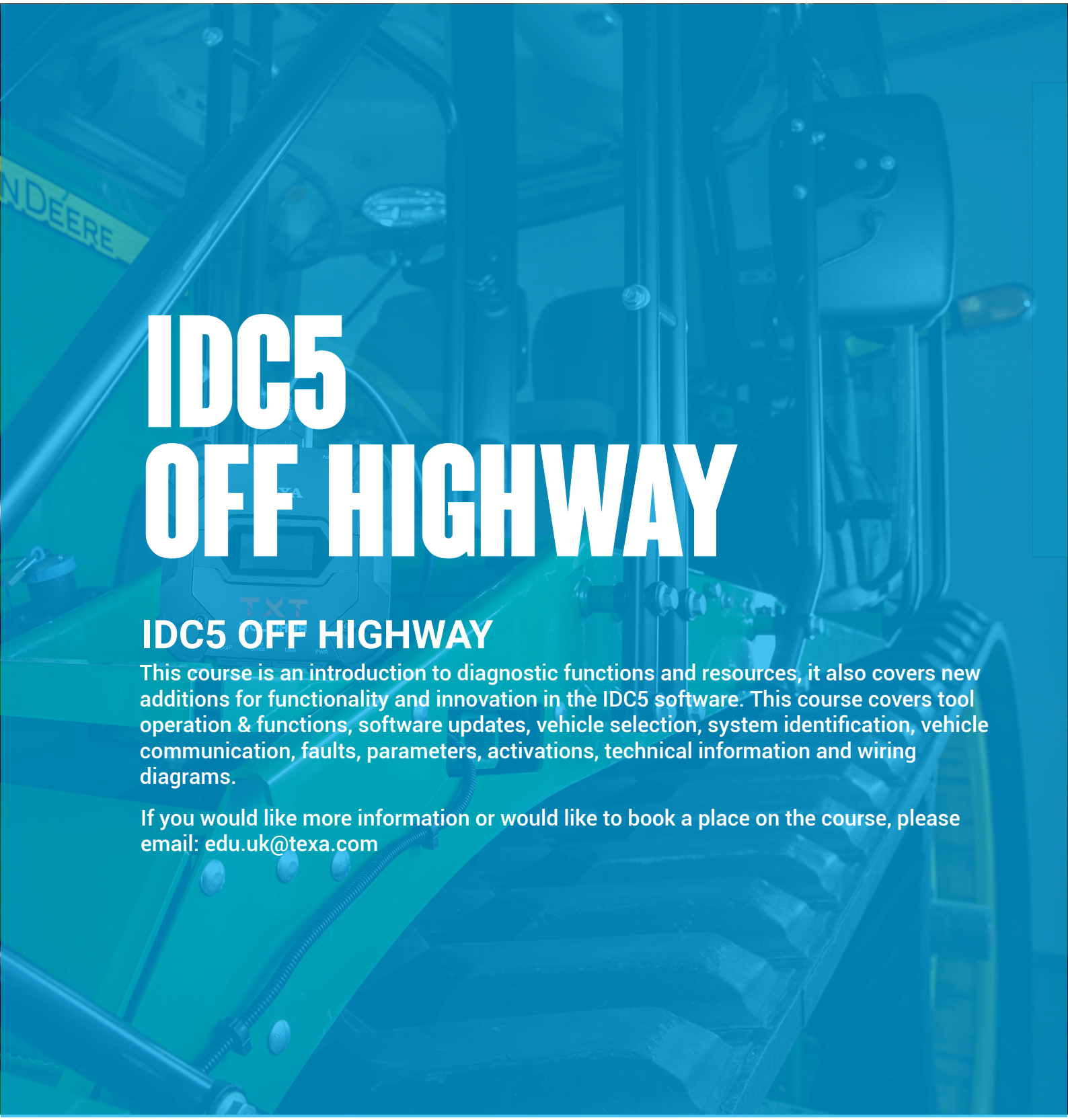
If you would like more information or would like to book a place on the course, please email: edu.uk@texa.com

THEORY

- TEXA IDC5 software.
- Utilities.
- IDC5 desktop and settings including software update via internet.
- Interface firmware update.
- Settings menu.
- Automatic configuration to pair up TEXA Bluetooth devices.
- Serial diagnosis.
- Vehicle and system selection including VIN scan facility.
- Cable selection.
- Serial diagnosis.
- Parameters.
- Faults.
- Status.
- ECU info.
- Activations.
- Settings.
- Technical information.
- Vehicle maintenance and service light reset.
- Activations short cut.
- Settings and adjustments short cut.
- Wiring diagrams.
- Tools and utility menu including saving vehicle fault codes to registration number in customer management and parameter data recording.

PRACTICAL

- On-vehicle connection identification.
- Vehicle system identification and scan.
- Function screen identification.
- Access to road test and record function (demonstration).
- Use of customer management for scan, screen shot, and results of repair.
- Use of data saving and loading feature for ECU replacement.



IDC5 OFF HIGHWAY

IDC5 OFF HIGHWAY

This course is an introduction to diagnostic functions and resources, it also covers new additions for functionality and innovation in the IDC5 software. This course covers tool operation & functions, software updates, vehicle selection, system identification, vehicle communication, faults, parameters, activations, technical information and wiring diagrams.

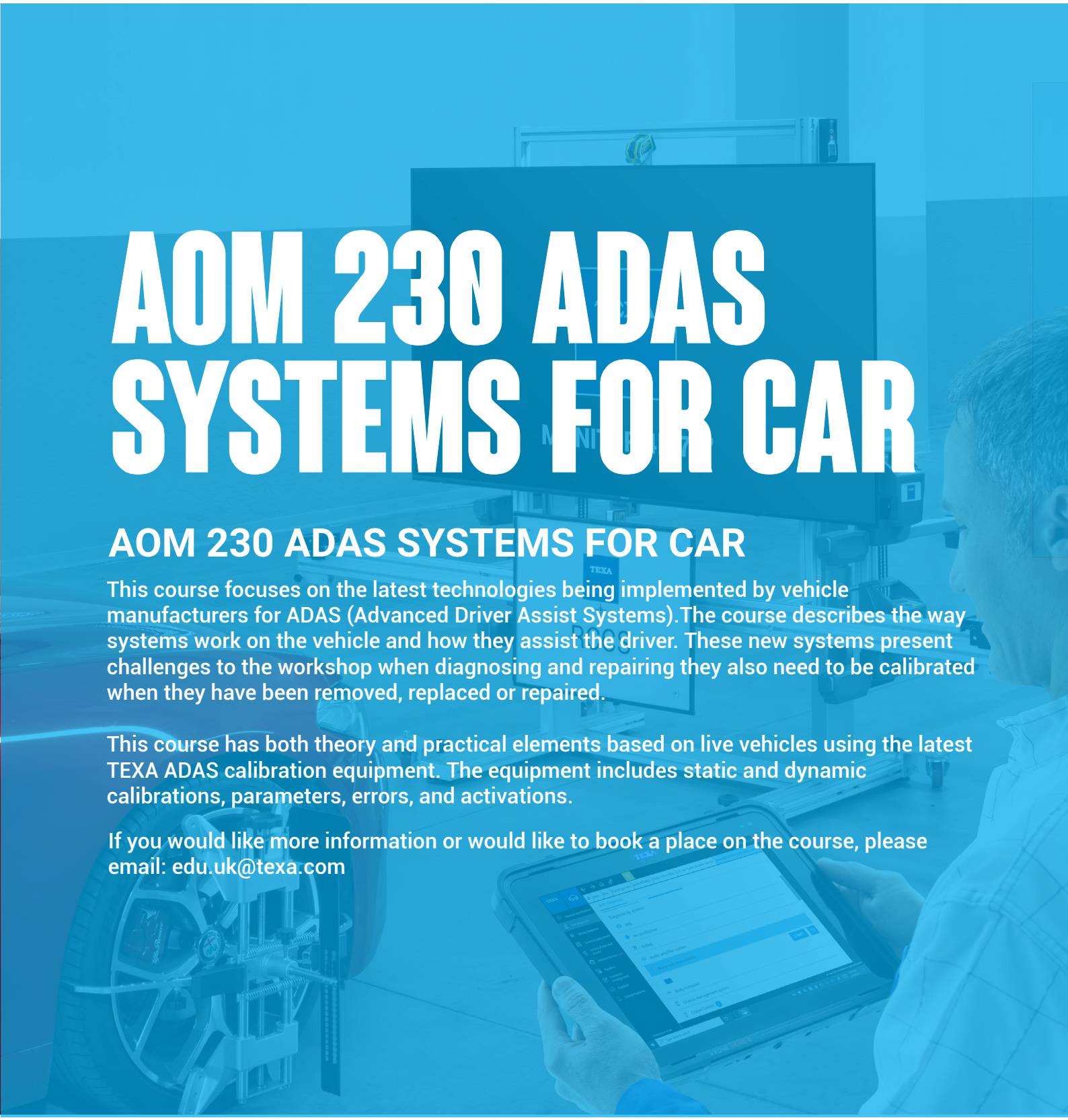
If you would like more information or would like to book a place on the course, please email: edu.uk@texa.com

THEORY

- Introduction to software applications
- Tools used for diagnosis
- Connectors, cables and pin outs
- Emissions and their tier system
- CAN systems and technology
- CAN advantages, components and messages
- IDC5 software characteristics and settings
- Software and hardware updates
- Communication troubleshooting
- Exchange/configuration manager
- Wiring diagrams
- Cable list
- Settings
- Configuration and customer management
- IDC5 use and best practice
- Fault finding
- Parameters, recording, settings, activations, dashboards & graphs.

PRACTICAL

- On-vehicle connection identification.
- Vehicle system identification and scan.
- Fault interrogation
- Screen identification
- Road test/record function and screen shots
- Customer management
- ECU replacement/ Data transfer
- Tests



AOM 230 ADAS SYSTEMS FOR CAR

AOM 230 ADAS SYSTEMS FOR CAR

This course focuses on the latest technologies being implemented by vehicle manufacturers for ADAS (Advanced Driver Assist Systems).The course describes the way systems work on the vehicle and how they assist the driver. These new systems present challenges to the workshop when diagnosing and repairing they also need to be calibrated when they have been removed, replaced or repaired.

This course has both theory and practical elements based on live vehicles using the latest TEXA ADAS calibration equipment. The equipment includes static and dynamic calibrations, parameters, errors, and activations.

If you would like more information or would like to book a place on the course, please email: edu.uk@texa.com

THEORY

- Pre-Calibration Requirements.
- Self-Diagnosis Help.
- Issues related to ADAS systems & Resolution methods.
- Examples of static calibration VOLKSWAGEN Group-Front Camera Calibration.
- Example of Dynamic Calibration.
- VOLVO-Front camera calibration.
- RADAR (Radio Detection and Ranging) LIDAR (Light Detection and Ranging).
- ADAS Sensors and their operation.
- Windscreen Requirements.
- Reversing Camera.
- Auto parking systems.
- Active cruise control systems.
- Emergency Braking Function and Forward Collision Warning system with Active Braking Assist.
- Lane departure warning systems.
- Ultrasound Sensors.
- Rear Radar.
- Camera Systems front and rear.
- Front Stereo Camera.

PRACTICAL

- ADAS Calibration System (RCCS) set up, and Calibration.
- Manual Radar Calibration.
- Front Camera Calibration.
- 360 Surround Camera calibration.

Candidates who successfully complete the course will receive an industry recognised AOM 230 certification.

ADBLUE SYSTEMS OF BMW, AUDI & MERCEDES

ADBLUE SYSTEMS OF BMW, AUDI & MERC

This course provides an overview of the principle of the reduction process, identification and functionality of the individual system components, fault status indication and the failure strategies related to modern vehicle applications. The course also provides an overview of the specific system variants employed by various manufacturers.

If you would like more information or would like to book a place on the course, please email: edu.uk@texa.com

THEORY

- The Selective Catalytic Reduction system, components and description.
- AdBlue liquid (including quality testing).
- The chemical reaction in the SCR catalyst.
- Generic overview of an SCR system.
- The Nox sensor and its operation.
- Injection quantity calculation.
- AdBlue dosing strategy.
- MERCEDES Bluetec system description.
- MERCEDES Bluetec control unit.
- AdBlue dosing module components, Circuit emptying valve, AdBlue dosage system electronic control.
- NOx sensor and control.
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- Self-diagnosis.
- VOLKSWAGEN and AUDI AdBlue system.
- First generation description for Audi.
- SCR catalytic process for the new generations.
- AdBlue control unit.
- AdBlue System Components, tank, level sensor, system heaters, additive pump and dosing module.
- Self-diagnosis.
- SCR 2 BMW SCR system 2.
- AdBlue supply for:
  Mazda.
  Opel (Vauxhall).
  Zafira C and Tourer.
  FORD Transit.
  Seat Alhambra.
  Renault Traffic.
  Peugeot-Citroen.
  AdBlue supply system control test.

PRACTICAL

- ADAS Calibration System (RCCS) set up, and Calibration.
- Manual Radar Calibration.
- Front Camera Calibration.
- 360 Surround Camera calibration.

SCR ADBLUE SYSTEMS (EURO 5 & 6 VEHICLES)

SCR ADBLUE SYSTEMS (EURO 5 & 6)

This course is structured to provide an overview of the legislation that has required the introduction of these systems to meet emissions control limits, the principle of the reduction process, identification and functionality of the individual system components, fault status indication and the failure strategies related to modern vehicle applications.

The course also provides an overview of the specific system variants employed by various manufacturers such as DENOXTRONIC for DAF, MAN and Scania, DENOXTRONIC 2 for Iveco, Volvo and Renault, BLUETEC for Mercedes Benz and the Cummins MSCR system. The course looks at the diagnostic features of these systems, the information provided by the ECU and the test functions that are available for system evaluation. This course is both classroom theory and workshop based, testing on live vehicles.

If you would like more information or would like to book a place on the course, please email: edu.uk@texa.com

THEORY

- Euro anti pollutant standards.
- Diesel engine pollutants.
- Euro IV and Euro V.
- After-treatment technology.
- FAP, DPF, SCR.
- Chemical functioning principal of the SCR catalyst.
- System components.
- ECUs.
- Additive tank, heaters, level and temperature sensors.
- Pump module, Metering, dosing and injectors.
- Catalyst.
- Pressure, humidity and temperature sensors.
- NOx sensors, Malfunction indication and fault codes.
- Regulation and legal reference.
- MI lamp.
- 1st level malfunction.
- 2nd level malfunction.
- Bosch Denoxtronic theory.
- Description and function of the individual phases.
- Individual system components description.
- Self-diagnosis with IDC5.
- Parameters.
- Faults.
- Activations including dosing module testing and measuring of delivery.
- Bosch Denoxtronic Self-diagnosis for DAF, MAN and Scania.
- Bosch Denoxtronic theory.
- Description and function of the individual phases.
- Individual system components description.

PRACTICAL

- Individual system component identification.
- Self-diagnosis with IDC5.
- Parameter checking.
- Activations including dosing module testing and delivery measurement.
- BOSCH DENOXTRONIC EURO 5 Self–diagnosis for Iveco, Volvo, Renault TESTING IVECO STRALIS.
- Individual system component identification.
- Individual system component identification.
- Self-diagnosis with IDC5.
- Parameter checking.
- Activations including dosing module testing and delivery measurement.
- Euro 6 Renault & Mercedes demonstrations.
- Individual system component identification.

TRAILER EBS ADVANCED SETTINGS

TRAILER EBS ADVANCED SETTINGS

This training course has been developed for technicians who maintain Trailer braking systems. The course covers principles of Trailer braking technology, system identification and testing leading to a better understanding of the brake control systems. The course then explores how EBS systems have evolved and the specific component functionality and diagnostic procedures. Also covered are the operating principles, functions and diagnostics of various types of EBS braking systems, as well as looking at the specific settings and programming functions available for Wabco C, D and E systems, Haldex Generation 1 & 2 and Knorr Bremse TEBS and Gen 2.

If you would like more information or would like to book a place on the course, please email: edu.uk@texa.com

THEORY

- TEXA IDC5 software.
- Utilities.
- IDC5 desktop and settings.
- Software updates.
- Interface firmware update.
- Settings menu.
- Automatic configuration to pair up the TEXA Bluetooth devices.
- Serial diagnosis.
- Vehicle and system selection.
- Serial diagnosis.
- Parameters.
- Faults.
- Status.
- ECU info.
- Activations.
- Settings.
- Technical information.
- Vehicle maintenance and service light reset.
- Activations short cut.
- Settings and adjustments short cut.
- Wiring diagrams.
- Tools and utility menu including saving vehicle fault codes to registration number in customer management and parameter data recording.

PRACTICAL

- Required Equipment and Data.
- Connection to trailer, including system identification.
- DTC reading.
- DTC erasing.
- Parameter interpretation.
- Status menu.
- Customer management file use.
- Exchange manager files use.
- ECU replacement.
- Parameter setting.
- Special Code facility.

ELECTRICAL & ELECTRONIC SYSTEMS & TESTING

ELECTRICAL & ELECTRONIC SYSTEMS & TESTING

This course is focused on electrical principles and testing, it is important for a vehicle technician to be able to correctly test, measure and diagnose electrical circuits for accurate fault diagnosis. Using the skills gained from this course will save time and expense from costly incorrect diagnosis and component replacement. We use purpose built electrical and electronic test boards the same as are used by many of the world's leading vehicle manufacturers and training colleges. These enable many of the circuits found on modern vehicles to be created quickly and tested easily.

If you would like more information or would like to book a place on the course, please email: edu.uk@texa.com

THEORY

- Electric Energy definitions, Current, Voltage, Voltage Generators, Electrical Resistance, electrical power Fuses, and Circuit breakers, operation and importance.
- Ohm's Law- the Law of Ohm and the Human Body
- Watt's Law- power in circuits.
- Measurements Multi-meter, Voltmeter, Ammeter, Ohmmeter.
- Electric Power (Watts, and Watts Law).
- Section of a Conductor- its effect on circuit capacity.
- Kirchoff Principle.
- The Electric Circuit, Connections, Components fitted in Series and parallel. Testing for power supply.

PRACTICAL

- Electrical Components Switches, Relays, Resistances, Potentiometers, NTC Sensors, PTC sensors and Capacitors.
- Magnetism the Direct Current Electric Motor, the Alternating Voltage Generator, the Transformer/Coil.
- Measurements: Oscilloscope- Scale, Settings of Voltage and Time, DC/AC Selection, Trigger Adjustment.
- Electronic Components the Theory of Semiconductors, Diodes, the Diode as a Rectifier of Alternating Current.
- Wiring Diagrams Schemes Standard.
- Analogue and Digital, Binary Numeration, Understanding how an ECU functions.

OPERATING & SERVICE PRINCIPLES OF R1234YF & R744

OPERATING & SERVICE PRINCIPLES OF LOW GWP REFRIGERANTS

This course is an introduction to the low GWP refrigerants R1234yf and R744 CO2. The course introduces new technology and systems along with the health and safety surrounding these refrigerants. It also covers the appropriate safety precautions, equipment required, practical sections for refrigerant identification, 744 service process and forming gas leak detection. It is recommended that candidates hold a valid F-Gas certificate to attend this course.

If you would like more information or would like to book a place on the course, please email: edu.uk@texa.com

THEORY

- Introduction to A/C legislation.
- Features of the R1234yf refrigerant.
- Precautions when using R1234yf.
- Problems when mixing R134a with R1234yf refrigerants.
- Technical measures and precautions for service stations with R1234yf.
- Technical features of A/C systems with R1234yf.
- Identification of contaminated refrigerant.
- Refrigerant identification procedure.
- Recovery of contaminated refrigerants.
- Features of the R744 refrigerant.
- Precautions when using R744.
- Description of the R744 refrigeration system.
- System components.
- Procedures for recharging a CO2 system through the R744 system.
- Operator safety
- Description of the service station.
- Preparation for use.
- Operating procedures.

PRACTICAL

- Demonstration of refrigerant identification.
- Demonstration of the leak detection process and equipment used.
- Degas and regas of a R744 system.
- An in-depth walk through of the equipment required.

FGAS REFRIGERANT HANDLING

FGAS REFRIGERANT HANDLING

This training course has been developed for individuals working on Mobile Air Conditioning (MAC) systems. Under current legislation, all individuals must achieve a refrigerant handling qualification that meets the EC 824/2006 regulation.

This course covers F-Gas regulations, health & safety, safe handling of refrigerants, air conditioning principles, component identification and system operation. This course delivers and is assessed by both theory and practical elements, online multiple choice test with instant result and feedback, followed by a series of practical tasks to establish competency in handling refrigerants.

If you would like more information or would like to book a place on the course, please email: edu.uk@texa.com

THEORY

- Regulations.
- Leakage.
- Montreal Protocol.
- Ozone Depletion.
- Kyoto Agreement.
- EPA 1990.
- Refrigerant Disposal.
- COSHH requirements.
- Refrigerant- what it is.
- Refrigerant Types.
- Safety Precautions.
- AC Principles.
- AC Systems.
- AC Health & Safety.
- Vehicle AC Servicing.
- Best Practice.
- Fuel Rails and AC.
- Refrigerant Identification and contamination checking, refrigerant cylinder types.

PRACTICAL

- Port Selection.
- Transferring Refrigerant from a cylinder to a station.
- Recovery from vehicle.
- Leak Detection OFN and forming gas.
- Vacuuming a system.
- Refilling a system.
- Understanding AC Pressure Gauges.
- End Test (online).

ADAS SYSTEMS FOR TRUCK

ADAS SYSTEMS FOR TRUCK

This course focuses on the latest technologies being implemented by vehicle manufacturers for ADAS (Advanced Driver Assist Systems) in heavy vehicles.The course begins with Driver Assistance Systems familiarisation, the technologies and equipment required to perform their check, maintenance and repair. Calibration of cameras, radars and sensors by using the dedicated equipment; using diagnostic techniques to reset the Driver Assistance Systems, check for possible malfunctions and find solutions. Practical examples of static calibration and dynamic calibration using technical tools and self-diagnosis. Performing diagnostic and troubleshooting procedures using the diagnostic tool; interpreting information, such as errors, parameters, statuses, activations and adjustments.

If you would like more information or would like to book a place on the course, please email: edu.uk@texa.com

THEORY

- ITS (Intelligent Transportation Systems).
- Description and Operation of Driving support systems.
- Lane Departure Warning System (LDWS).
- Adaptive Cruise Control (ACC).
- BSD - Blind Spot Detection or Sideguard Assist.
- Adaptive High Beam Control.
- Forward Collision Warning.
- Advanced Emergency Braking System AEBS.
- Sensors and Actuators in the ADAS System.
- Radar (Radio Detection and Ranging).
- Multi-Functional Camera.
- Actuators.
- Help Diagnosis.
- Example of Static calibration for Radar on MAN and SCANIA vehicles.
- Example of Static calibration camera on VOLVO vehicles.
- Example of Dynamic calibration radar on VOLVO vehicles.
- Example of Static camera calibration on DAF vehicles.
- Example of Static camera calibration on MERCEDES vehicles.

PRACTICAL

- Renault T Series calibrations
- Equipment set up & selection

COURSE COSTS

IDC5 TECHNICAL TRAINING FOR **TRUCK** 2 DAYS **£330**	IDC5 TECHNICAL TRAINING FOR **CAR** 2 DAYS **£330**	IDC5 TECHNICAL TRAINING FOR **BIKE** 1 DAY **£220**	IDC5 **OFF HIGHWAY** 2 DAYS **£350**
AOM 230 **AOM 230** ADAS SYSTEMS FOR CAR 2 DAYS **£550**	DIAGNOSIS & CALIBRATION FOR **ADAS TRUCK** 1 DAY **£300**	**ELECTRICAL** & ELECTRONIC SYSTEMS 2 DAYS **£350**	**TRAILER EBS** ADVANCED SETTINGS 2 DAYS **£330**
FGAS: REFRIGERANT HANDLING 1 DAY **£280**	**SCR/ADBLUE** SYSTEMS FOR EURO 5 & 6 2 DAYS **£450**	**ADBLUE SYSTEMS** OF BMW, AUDI & MERCEDES 2 DAYS **£450**	OPERATING PRINCIPLES OF **R1234YF & R744** AC SYSTEMS 1 DAY **£270**

CANCELLATION POLICY

- All cancellations and transfer requests must be made in writing.
- Customer name changes can be made at any time without charge, except for the Level 3 Award in Automotive Refrigerant Handling (F-Gas) course, where there will be a £25.00 fee.
- Any incorrect spelling of candidates' names, where the customer is at fault, will incur a £5.00 fee. Where a customer cancels their place on the course, or requests to transfer to an alternative course or date, the full cost of the course will be due, unless notice specified below is given prior to course start date:

More than 4 weeks' notice	No charge
4 weeks' notice	30% of the cost
2-3 weeks' notice	50% of the cost
1 - 2 weeks' notice	75% of the cost
Less than 1 weeks' notice	100% of the cost

Refunds of monies paid will be made to customers if:

1. TEXA UK cancels the course and does not offer an alternative date.
2. There are individual exceptional circumstances where the customer cannot attend.
3. A complaint is upheld.

Other
• Where the customer is to provide a venue and/or equipment, TEXA UK reserves the right to verify its suitability.
• TEXA UK reserves the right to provide a substitute trainer should the nominated trainer become unavailable.
• TEXA UK reserves the right to re-schedule any commercial programme where minimum numbers of candidates are required and not achieved.


Immagine dispositivo
R15-2
M132
S113-1
S113-2
S529
E43
S158
V598
V149
S374
S375
Scrivi qui per eseguire la ricerca

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