



UPSKILL YOUR WORKFORCE

WITH PRESTON'S COLLEGE

ENGINEERING,
AUTOMOTIVE AND
HEALTH & SAFETY
COURSES

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**DO YOU HAVE EMPLOYEES THAT ARE
READY TO UPSKILL?
ARE YOU LOOKING TO ENHANCE
PRODUCTIVITY AND IMPROVE STAFF
RETENTION?
ALLOW PRESTON'S COLLEGE TO HELP YOU!**

WHAT CAN PRESTON'S COLLEGE OFFER?

Preston's College are a leading technical specialist college, rated 'GOOD' by Ofsted, taking great pride in supporting both the local community and all of our learners to achieve the qualifications and outcomes they need. Already working with a host of employers across the wider Lancashire region and working to fulfil key LEP priorities, we have built extensive partnerships with leading businesses, allowing us to confidently address local skills gaps, as we work with employers to meet business needs whilst creating confident individuals, equipped with the skills required to meet both regional and economic demands.

Our Engineering and Automotive departments are housed in the impressive I-Stem building; a multi-million pound, purpose built facility offering a dynamic learning environment, including an advanced

manufacturing workshop, multi-functional science laboratories and a host of 3D printers, designed to help learners formulate ideas, test briefs and present their findings.

Engineering continues to be a highly sought after profession, with engineers and technicians amongst some of the most in-demand positions in the world.

Earning, on average, 10% more than the average graduate salary, with a significant skills shortage and estimation that more than 2.65 million UK engineering jobs need filling by 2024, there has never been a better time to progress your staff through higher level qualifications, as you focus upon staff retention and CPD opportunities. Utilise the wide sector-based technical and professional offer at Preston's College to enhance business productivity, support business objectives and organisational growth.



ENGINEERING COURSES AVAILABLE AT PRESTON'S COLLEGE:

WELDING

- Level 1 Award in Welding (MIG, TIG, MMA)

This Level 1 Award is ideal for individuals looking to progress within the fabrication and welding sector, who require formal qualifications to reflect current experience across any of the welding processes, or for those starting out in the industry looking to undertake additional responsibilities within the workplace.

Those undertaking the course will study one module, from:

- > Manual Metal Arc (MMA) Welding
- > Tungsten Inert Gas (TIG) Welding
- > Metal Inert Gas (MIG) Welding

To successfully pass the course, five practical assignments, consisting of welding joints in simple positions (horizontal) and one oral knowledge test must be passed, with successful completion evidencing an individual's competence in their chosen welding method.

Inexperienced individuals must commence their welding studies with MIG, a process that allows multiple parts to be welded in quick succession in areas such as steel frame furniture, door frames, car body repairs and engineering production factories. Completion of one module provides opportunities to progress onto another welding process at Level 1 (TIG or MMA).

MMA is often the welding method of choice for on-site processes, where mobile machines will be used in processes such as steel frame erections and groundworks where the joining of substantial material is required, such as building sites. The quality of the weld depends on the skill of the welder.

Successful completion of two Level 1 modules will enable individuals to progress onto the more advanced Level 2 Certificate in Welding at Preston's College.

Course duration:

3 hours per week for 12 weeks

Time: 6-9pm

Location of study:

Preston's College, I-Stem Centre

Cost:

£450

Additional information:

All learners studying on the Level 1 Award in Welding are required to wear appropriate PPE at all times, including steel toe cap boots and flame retardant overalls. Costs will vary but both of these items will need to be purchased and brought to the first class.

WELDING

- Level 2 Certificate in Welding

The Level 2 Certificate in Welding is ideal for those looking to further develop their welding skills at a more advanced level, having already achieved two Level 1 Awards in Welding (either MIG, TIG or MMA). Developing and practising the vertical welding of joints, individuals on this course will be required to commit a number of hours to practising a number of welds, progressing knowledge and skills to Level 2 standard.

Those undertaking this course must complete 14 credits, across two units, chosen from:

- > TIG Stainless Steel
- > Metal Inert Gas Welding
- > Tungsten Inert Gas Welding
- > Tungsten Inert Gas Welding-Aluminium
- > Manual Metal Arc

All sessions are practical workshop sessions, with individuals expected to do small amounts of reading and research, in order to complete the knowledge test at the end of the course.

To successfully pass the course, five practical assignments consisting of welding joints in standard (vertical) positions and one oral knowledge test, for each unit studied, must be passed, with successful completion evidencing an individual's competence in their chosen welding method.

Completion of the course provides progression opportunities onto additional qualifications at Preston's College, including Coded Welding.

Course duration:

3 hours per week for one year

Time: 6-9pm

Location of study:

Preston's College, I-Stem Centre

Cost:

£1,075 (For those choosing stainless steel as one of the modules, the cost will increase to £1,349) Please contact us to speak to an Advisor as funding may be available, dependent upon individual circumstances.

Additional information:

All learners studying on the Level 2 Certificate in Welding are required to wear appropriate PPE at all times, including steel toe cap boots and flame retardant overalls. Costs will vary but both of these items will need to be purchased and brought to the first class.

CODED WELDING

BS 4872-1: 1982

Individuals already working in industry as an experienced welder, or those with significant previous experience looking to make a return to the sector, will find the coded welding course an ideal opportunity for formal recognition of already held skills.

The course assesses current competence levels to the relevant standard and is evidence that staff can follow a weld procedure and produce welds to the given standards in MIG, TIG or MMA.

Individuals are required to be a proficient welder in the process that requires coding. During the sessions, learners will undertake several weld tests on our specialist equipment. These tests are then assessed and graded to ensure that they are structurally suitable and of a pass level. Test welds typically include: Butt, Fillet, Lap, Corner and Position e.g. Flat, Vertical and Overhead.

Competent welds are assessed against British Standards and upon completion, a qualification is gained that is recognised within the welding industry.

Course duration:

Typically one day (dependent upon current skill level and experience)

Location of study:

Preston's College, I-Stem Centre

Cost:

£600

Additional information:

All learners undertaking a coded welding assessment are required to wear appropriate PPE at all times, including steel toe cap boots and flame retardant overalls.

**THIS COURSE
PROVIDES AN
OPPORTUNITY TO
DEMONSTRATE
SOME OF THE
HIGHEST LEVELS OF
WELDING SKILLS**

DIGITAL**- Level 2 Computer Aided Design (2D)**

Ideal for staff looking to extend their knowledge of Computer Aided Design, the Level 2 course develops the skills and knowledge of staff already holding basic skills, as they apply those skills to the design process.

Utilised for a wide range of applications, where technical and design functions are required, including mechanical design, architecture, landscaping and interior design, the course provides real opportunities for staff to develop their knowledge and practical skills, to competently use industry standard software, in a range of businesses.

Staff undertaking the course will study a range of modules, providing the opportunity to:

- > Use associated IT, CAD hardware and operating systems
- > Use basic file management techniques and maintain health and safety requirements
- > Use and identify key components of the software relating to the 2D drawing environment
- > Use a range of viewing commands and setup the drawing space
- > Use drawing commands to produce shapes
- > Use CAD software coordinate systems to aid accurate drawing
- > Use hatch, text and simple dimensioning routines
- > Use basic editing commands and produce simple hard copies

To successfully pass the course a range of assignments and tests related to each module studied must be completed and achieved, with successful completion of the course providing opportunities to progress onto the Level 3 Computer Aided Design (2D) Award at Preston's College.

Course duration:

3 hours per week for 30 weeks

Time: 6-9pm

Location of study:

Preston's College

Cost:

£750

DIGITAL**- Level 3 Computer Aided Design (2D)**

Ideal for those who have already studied Computer Aided Design at Level 2 this course is particularly suited to staff employed in the design, management and maintenance of all types of construction, however, the course is not exclusive to those working in this sector.

Building upon the understanding and principles taught at Level 2, learners on the course can expect to cover a wide range of 2D drawings and editing commands, becoming familiar with the necessary techniques required to produce and edit drawings of medium complexity and preparing drawings for output to hard copy.

During their time on the course, you can expect your staff to study a variety of modules, encompassing:

- > Using a layering system and different line type styles
- > Defining and using a system for grouping objects to form blocks or libraries
- > Producing isometric drawings within the 2D environment
- > Defining use of an adjustable co-ordinate system based on user requirements
- > Using complex dimensioning routines
- > Using different drawing spaces and complex multi viewing areas
- > Producing hard copies of drawings
- > Making enquiries of an existing drawing and placing reference points
- > Using a means of pre-command object selection in order to carry out editing processes
- > Changing the properties of drawn entities
- > Editing blocks/symbols and hatched areas
- > Modifying continuous lines formed by a connected sequence of lines or arcs
- > Using a method to remove unused items and rename other items logically

To successfully pass the course a range of assignments and tests related to each module studied must be completed and achieved, with successful completion of the course demonstrating the ability to work at Level 3 whilst providing opportunities to progress onto higher level study, if desired.

Course duration:

3 hours per week for 30 weeks

Time: 6-9pm

Location of study:

Preston's College

Cost:

£875

**SUCCESSFUL
COMPLETION OF
SOME LEVEL 3 CAD
AND CAM COURSES
PROVIDES A 3
YEAR LICENCE TO
FUSION 360**

DIGITAL**- Level 3 Computer Aided Design and Manufacture (CAD and CAM)**

This six week evening course is ideal for those with some previous experience of CAD, with employees learning how to operate Fusion 360 confidently, providing the skills and knowledge needed to design and draw effectively and efficiently. Successful completion of the course provides learners with a three year licence to the product.

During the six week learning period, your staff will study a variety of topics, in the following core areas:

- > Creation of 3D CAD models
- > CAM profiling
- > Simulation - ensuring satisfactory component manufacturing and production of a series of co-ordinates
- > Running remote versions of the machine

All learners on the course will be taught in purpose built workshops by industry experienced professionals, allowing all to achieve a competence level where undertaking the fundamental basics of CAD and CAM can be confidently executed. Successful completion of the course provides a progression opportunity onto the Computer Aided Manufacture (CAM-3 axis milling) course at Preston's College.

Course duration:

3 hours per week for 6 weeks

Time: 6-9pm

Location of study:

Preston's College

Cost:

£375

DIGITAL**- Level 3 Computer Aided Design and Manufacture (CAD and CAM)**

Natural progression for individuals who have already completed the six week, short course in CAD/CAM at Preston's College, the Computer Aided Design - 3 Axis Milling provides an opportunity for staff to develop their current skills, as they learn how to confidently operate a VMC (Vertical Machining Centre), importing previously processed designs using Heidenhain Machine Language.

Affording opportunities to select relevant tools and set up machines, before testing the programme in simulation mode, once confident in the programme's use, the full programme will be run to create a designed component.

During the six week period, your staff will cover core subjects in:

- > Machine setting and testing
- > Programme impact and testing
- > Final manufacture
- > Prototype review and adjustment

Delivered in purpose built workshops, by industry experienced professionals, successful completion of the course provides opportunities to progress onto higher level study, if desired.

Course duration:

3 hours per week for 6 weeks

Time: 6-9pm

Location of study:

Preston's College

Cost:

£575

ENGINEERING**- Level 3 Subsidiary Diploma**

Suitable for employees wishing to progress within the Engineering sector and qualified at Level 2 in Maths and English (GCSE or Functional Skills Level 2) this course provides grounding in the academic study of engineering, alongside a solid foundation for entry on to the Higher National Certificates within the mechanical or electrical engineering disciplines at Preston's College.

The Subsidiary Diploma in Engineering comprises of 60 learning credits over two mandatory units, plus one optional unit, with modules including:

- > Health and Safety in the workplace
- > Mechanical principles and applications or electrical and electronic principles
- > Mathematics for engineering technicians

Each unit is assessed by a series of assignments designed to meet pass, merit and distinction criteria set by the awarding body. Individuals are graded on application of knowledge and understanding, development of practical and technical skills, personal development for occupational roles and the application of generic skills.

Course duration:

One afternoon and one evening per week, for one year

Location of study:

Preston's College, I-Stem Centre

Cost:

£3,482 (Advanced Learning Loans available). Please contact us to speak to an Advisor, to find out if your employees are eligible for an Advanced Learning Loan.

THIS COURSE IS THE IDEAL FOR THOSE ALREADY IN INDUSTRY, LOOKING TO RETURN TO EDUCATION.

HEALTH AND SAFETY COURSES AVAILABLE AT PRESTON'S COLLEGE:

IOSH

- IOSH Working Safely

This one day course is ideal for employees requiring key basic health and safety information. This short but highly informative course is suitable for those working in a variety of roles and sectors.

The qualification covers four key modules, studied throughout the day:

- > The importance of working safely
- > Defining hazard and risk
- > Identifying common hazards
- > Improving safety performance

Successful completion of the course is dependent upon learners completing and passing both a multi-format question paper and three hazard spotting exercises. In addition, completion provides opportunities for staff to take their health and safety learning further, with progression opportunities at Preston's College including the NEBOSH National General Certificate in Occupational Health and Safety.

Course duration:

One day

Time: 9.15am-4.15pm

Location of study:

Preston's College

Cost:

£125

IOSH**- IOSH Certificate in Managing Safely**

Suitable for managers, supervisors and employees with specific health and safety duties or those looking to enhance their knowledge of health and safety management, this course will help individuals gain the knowledge, skills and confidence needed to carry out the practical actions required to confidently tackle the health and safety issues they are responsible for. Upon completion this certificate demonstrates a clear commitment to good standards of health and safety, benefiting both the individual and your organisation.

Organisations putting employees on this three day course will benefit from the individual returning with additional knowledge and skills in the following areas, as a variety of modules are covered, including:

- > Assessing risk
- > Controlling risks
- > Understanding responsibilities
- > Understanding hazards
- > Investigating incidents
- > Measuring performance

To successfully pass the course, employees must complete and achieve a minimum standard in a 45 minute written paper, consisting of 20 multiple choice questions and a practical risk assessment project. Upon completion, all those who do pass will be awarded a Managing Safely Certificate from the Institution of Occupational Safety and Health (IOSH) – the world's largest health and safety membership organisation. In addition, achievement of the IOSH Managing Safely Certificate provides opportunities to progress onto a range of NEBOSH qualifications, including the National General Certificate in Occupational Health and Safety, at Preston's College.

Course duration:

Three days

Time: 9.15am-4.45pm

Location of study:

Preston's College

Cost:

£325

NEBOSH**- National General Certificate in Occupational Health and Safety**

This globally respected qualification is designed for supervisors, managers and those who need a broad understanding of health and safety issues, with the qualification providing an in-depth overview of how to effectively manage risk, in a variety of organisations. The course can support in minimising workplace injuries, boosting employee wellbeing and strengthening your organisational health and safety culture.

Ideal for employees already in positions with health and safety responsibilities, as well as those looking to take their first steps onto a professional health and safety career, the course also affords an excellent foundation for further professional study.

The syllabus of the course is mapped to the National Occupational Standards for Health and Safety, covering a variety of modules including:

- > Effectively managing health and safety
- > Identifying and controlling common workplace hazards
- > Measuring success in the workplace
- > Legal requirements in the UK

All learners on the course must complete and pass modules which are assessed separately, with assessment methods including a written exam and a practical risk assessment project based on the individual's own workplace. The practical assessment will evidence the application of taught occupational health and safety principles.

In addition, successful completion of the NEBOSH National General Certificate in Occupational Health and Safety provides individuals with Associate Membership (AIOSH) of the Institution of Occupational Safety and Health (IOSH). In addition, holders of the National General Certificate who can demonstrate at least 5 years in a health and safety role are eligible to apply for entry to the grade of Technician (TECH IOSH) with the Institution of Occupational Safety and Health (IOSH), meaning the qualification can add real value to your business. The course also satisfies the eligibility requirements for Associate Membership of the International Institute of Risk and Safety Management (AIIRSM), whilst also providing progression opportunities onto higher level study.

Course duration:

6.5 hours per week for 12 weeks

Time: 9.15am-4.15pm

Location of study:

Preston's College

Cost:

£850

**NEBOSH IS A
LEADING GLOBAL
ORGANISATION,
PROVIDING
INTERNATIONALLY
RECOGNISED
QUALIFICATIONS!**

EMERGENCY FIRST AID

Ideal for individuals with no previous first aid experience looking to gain the basic skills and knowledge needed to confidently take charge at the scene of an accident, this one day course provides the emergency first aid skills needed to deliver essential first aid, in the absence of a fully qualified first aider. Ideal for any employees requiring regulated first aid training for low/medium risk environments, the course is compliant with the Health and Safety Executive first aid syllabus and covers the essentials of resuscitation, unconscious patients, broken bones, bleeding and other basic medical emergencies.

As part of the course, learners will study the role of the first aider, confidently being able to manage an emergency situation safely, including the use of CPR. More common injuries and illnesses are also covered, as employees leave with the confidence to support a casualty suffering from illness or injury.

As part of the course, employees will study two mandatory modules, with assessment of both modules being undertaken by a range of practical assessments and questions.

Upon successful completion of the course, all staff will be able to provide first aid safely and to a national standard.

Course duration:

One day

Time: 10am-4pm

Location of study:

Preston's College

Cost:

£99

OCCUPATIONAL HEALTH AND SAFETY PRACTICE

- Level 5 NVQ Diploma

Ideal for employees already working in a health and safety capacity and already holding a Level 3 NVQ qualification or equivalent, the Level 5 NVQ Diploma in Occupational Health and Safety Practice is one of the leading health and safety qualifications in the UK, designed specifically for safety professionals who wish to attain Chartered Status of IOSH (CMIOSH).

To achieve the qualification, learners must complete all mandatory modules and to qualify for GradIOSH level membership must also complete the professional development and ethics in health and safety management module from the elective list. Full modules studied include:

Mandatory Modules:

- > Developing and implementing effective communication systems for health and safety information
- > Promoting a positive health and safety culture
- > Developing and maintaining individual and organisational competence in health and safety matters
- > Controlling health and safety risks
- > Developing and implementing proactive and reactive monitoring systems
- > Developing and implementing health and safety emergency response systems and procedures
- > Developing and implementing health and safety review systems
- > Developing and implementing a health and safety audit
- > Behavioural safety in the workplace
- > Developing and implementing the health and safety policy

Elective Modules (these are optional and subject to additional charge):

- > Influencing improvements in health and safety practice
- > Developing, implementing and reviewing a health and safety strategy
- > Contributing to health and safety legal actions
- > Managing contractors to ensure compliance with health and safety
- > Developing and implementing the health and safety induction process
- > Professionally developing ethics in health and safety management

Exact assessment methods employed will vary from module to module but typically include written work, documents, videos, photographs, on-site visits, and witness statements. Work is submitted and marked electronically via the college's e-portfolio system, with successful completion of the course being achieved when confirmed by internal and external verifiers.

Course duration:

1.5 hours per month for 18 months

Time: 6:00pm-7.30pm

Location of study:

Preston's College

Cost:

£1,504

MEET HEALTH & SAFETY TUTOR, MARY

Construction qualified and NEBOSH examiner, Mary, delivers Preston's College highly acclaimed suite of NEBOSH qualifications. Ensuring classes are fully relatable, so that learners understand how Health and Safety is a crucial part of everyday life, not just something you have to do, Mary ensures classes are highly interactive, with the classroom based learning providing invaluable opportunities for learners to share experiences that cannot be achieved via distance learning.

AUTOMOTIVE COURSES AVAILABLE AT PRESTON'S COLLEGE:

VEHICLE INSPECTION

- Level 2 Diploma

Suitable for individuals who have already obtained a Level 1 Diploma in Vehicle Maintenance and Repair or for those with substantial industry experience, this programme aims to develop an employee's knowledge of vehicle inspection with the opportunity to study both the theory and practical aspects of a range of routine vehicle inspection, fitting and maintenance procedures.

Modules studied include:

- > Routine light vehicle maintenance, including engine systems
- > Inspecting, repairing and replacing light vehicle standard and high performance tyres
- > Carrying out light vehicle four wheel alignment
- > Inspecting and replacing light vehicle exhaust components, suspension dampers and springs, vehicle batteries and braking systems and components
- > Knowledge and understanding of health and safety in the workplace, agreeing customer vehicle needs and other skills associated with working in a garage

Assessment is made up of two core components including both practical tasks and online testing.

Upon completion, individuals are able to progress onto a variety of Level 3 qualifications including Vehicle Maintenance and Repair or Auto Electrical and Mobile Electrical Principles at Preston's College.

Course duration:

3 hours per week for 1 year

Time: 6:00pm-9:00pm

Location of study:

Preston's College

Cost:

£1,376 (Please speak to an Advisor as funding may be available, dependent upon individual circumstances.)

LIGHT VEHICLE MAINTENANCE AND REPAIR PRINCIPLES

- Level 3 Diploma

The Level 3 Diploma is suitable for individuals employed in the automotive sector, already holding a relevant level 2 qualification or with significant industry experience. Alongside the development of transferable skills, learners on this course will study principles in-depth, as they begin to understand not only what has gone wrong with a vehicle but are also able to actively find solutions to those problems.

Modules include:

- > Advanced chassis technology
- > Advanced engine technology
- > Advanced transmission technology
- > Advanced electrical and electronic technology

The qualification is assessed using a range of methods appropriate for this level of technical qualification, set by IMI, including practical skills assessments, written assignments and online tests.

This qualification provides a high level of underpinning knowledge and skill, which enables progression onto some higher education qualifications in automotive and engineering related subjects. It also provides the foundation for progression on to the MOT Level 2 Award (New Testers), dependent upon additional eligibility criteria.

Course duration:

3 hours per week for 1 year

Time: 6:00pm-9:00pm

Location of study:

Preston's College, I-Stem Centre

Cost:

£5,509 (Advanced Learning Loans Available). Please contact us to speak to an Advisor to find out if your employees are eligible for an Advanced Learning Loan.

AUTO ELECTRICAL AND MOBILE ELECTRICAL PRINCIPLES

- Level 3 Diploma

This course is suitable for those employed in the automotive sector, already holding a relevant level 2 qualification or with significant industry experience. Alongside the development of transferable skills, this qualification is designed to provide an in-depth understanding of advanced automotive technology, including diagnostic and repair techniques for a range of electrical systems.

The course covers vehicle electrical systems including auxiliary electrical, engine management systems and chassis systems and provides learners with an understanding of not only what has gone wrong with a vehicle but also the ability to actively find solutions to those problems.

This qualification will enable individuals to carry out advanced automotive fault diagnostics on a range of vehicle systems and full modules studied include:

- > Health, safety and good housekeeping in the automotive environment
- > Support for job roles in the automotive environment
- > Materials, fabrication, tools and measuring devices used in the automotive environment
- > Diagnosis and rectification of vehicle auxiliary electrical faults
- > Inspecting vehicles using prescribed methods
- > Diagnosis and rectification of engine electrical faults
- > Diagnosis and rectification of transmission and chassis electrical faults
- > Conducting vehicle enhancement and installation consultations with customers in the motor vehicle environment

Assessments are made up of three components that include practical tasks, online tests and written assignments. Completion of the programme demonstrates competence in the field and enables progression onto higher levels of study, if desired. It also provides the foundation for progression onto the MOT Level 2 Award (New Testers), dependent upon additional eligibility criteria.

Course duration:

3 hours per week for 18 months

Time: 6:00pm-9:00pm

Location of study:

Preston's College, I-Stem Centre

Cost:

£3,433 (Advanced Learning Loans available). Please contact us to speak to an Advisor to find out if your employees are eligible for an Advanced Learning Loan.

**INDUSTRY
BENCHMARK
COURSES!**

MOT LEVEL 2 AWARD (NEW TESTERS FOR CLASSES 4 & 7)

This course is suitable for Automotive Engineers, currently employed in the capacity of servicing and repairing vehicles, looking to become qualified to carry out MOT testing for classes 4 and 7. This Driver and Vehicle Standards Agency (DVSA) approved qualification requires all learners to meet very specific eligibility criteria in order to undertake this programme. All applicants must have:

- > Four years' experience as a skilled mechanic (in the class you wish to test)
- > A current and full UK driving licence (in the class you wish to test)
- > No unspent criminal convictions connected with the motor trade
- > A Pre-requisite Level 3 qualification in the trade. A full list of accredited qualifications can be found at <https://www.gov.uk/become-an-mot-tester/eligibility>

Modules studied on this Level 2 include:

- > Safe working practices in the vehicle test centre
- > Working relationships within the vehicle test centre
- > Managing own professional development as a vehicle tester
- > Carrying out pre-test checks for a statutory periodic roadworthiness test
- > Carrying out a statutory periodic roadworthiness test (classes 4 and 7)

Assessments on the course include a multiple choice question test and a practical assessment, with successful completion of both elements required for the achievement of Level 2 MOT Testing Award for Group B vehicles (class 4 and 7) - the qualification required to undertake the MOT Demonstration Test in a test station.

Course duration:

3 hours per week for 10 weeks

Time: 6:00pm-9:00pm

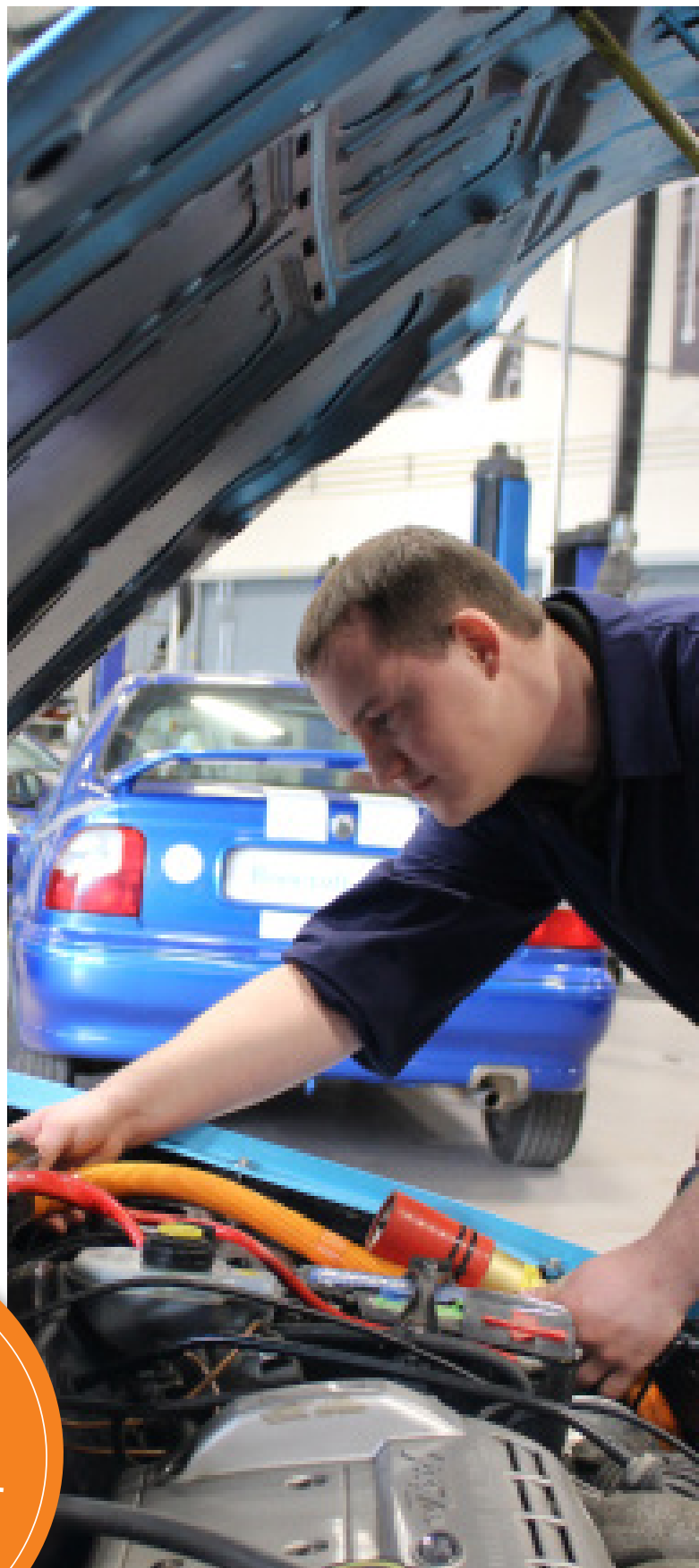
Location of study:

Preston's College

Cost:

£595

**THE ONLY
QUALIFICATION
THAT ALLOWS
EMPLOYEES TO
LEGALLY CARRY OUT
MOT TESTING IN A
TEST STATION.**



LEVEL 2 AWARD – HYBRID ELECTRIC VEHICLE OPERATION AND MAINTENANCE

This course is appropriate for individuals employed in the automotive sector and suitably qualified with previous vehicle maintenance qualifications. This IMI endorsed qualification is designed to develop an individual's essential technical knowledge of electrical vehicles, hybrid components and the fundamentals of working safely on vehicles fitted with high voltage hybrid technology.

In order to achieve the qualification, individuals need to obtain credits related to automotive internal combustion and electric hybrid technology components and operation.

Modules include:

- > Hybrid system components and operation
 - Function of battery modules; Types, capacities, housings, materials, connections and charging process
 - Function of hybrid motors; types, connections, power rating, materials, armatures and windings
 - Function of associated hybrid components; cabling, circuit protection, control units and distribution units
- > Working safely on hybrid and related vehicle systems
 - Safety precautions required to carry out routine maintenance; protective equipment and clothing, disposal of waste materials, leakages, and isolation of high voltage electrical systems
 - Identifying high voltage cabling and associated components; wiring diagrams, warning signs and voltmeters
- > Carrying out maintenance and repair activities on hybrid vehicles
 - Safety procedures prior to carrying out repair activities; identification and preparation for isolation
 - Precautions taken prior to removing and replacing high voltage components; safe systems and voltage checks
 - Methods to reinstate vehicles after repairs affecting hybrid vehicles; fault code readers and on board displays
 - Tools and equipment required to carry out work; hand tools, code readers, specialist readers and voltmeters
 - Connecting power sources to hybrid vehicles; identification and correct connections methods, draw capability of vehicles and utilisation of cables

The course will be assessed using a range of methods appropriate for this level of technical qualification, including practical skills assessments and one closed booklet test.

This qualification provides a high level of underpinning knowledge and skill, which enables progression onto some higher qualifications in automotive related subjects. Courses to consider are the Level 3 Diploma in Light Vehicle Maintenance and Repair or Level 3 Diploma in Auto Electrical and Mobile Electrical Principles.

Course duration:

3 hours per week for 4 weeks

Time: 6:00pm-9:00pm

Location of study:

Preston's College, I-STEM Centre

Cost:

£275



Looking for something else?

Preston's College offer a wide range of other courses, suitable for employees in the Engineering, Automotive and Health & Safety industries.

These include:

- Leadership & Management (ILM accredited)
- AAT Accounting
- I.T

INTERESTED?

Contact us to find out more about any of the courses featured in this brochure or to secure places for your staff.

Preston's College

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   /prestoncollege