

Edexcel BTEC Level 4 HNC Diploma in Automotive Diagnostics and Management Principles (QCF)

Specification

Edexcel BTEC Higher National
September 2012

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Edexcel BTEC Level 4 HNC Diploma in Automotive Diagnostics and Management Principles (QCF)

The Qualifications and Credit Framework (QCF) has been introduced to replace the National Qualifications Framework (NQF). It recognises achievement through the award of credit for units and qualifications, working at all levels between Entry level and level 8.

Edexcel BTEC HNCs (Higher National Certificates) are now at level 4 and are a minimum of 120 credits in size.

The qualification remains as an Intermediate level qualification on the Framework for Higher Education Qualifications (FHEQ).

Progression to Edexcel BTEC Higher Nationals continues to be from level 3 qualifications and progression from Edexcel BTEC Higher Nationals will normally be to qualifications at level 6. Learners' progression routes do not necessarily involve qualifications at every level.

The HNC can be taken as a stand-alone qualification.

When a learner enrolls for a HNC they will be eligible to gain a grade for the HNC.

Existing NQF Higher National units achievement can count towards the QCF Edexcel BTEC Higher Nationals.

Edexcel BTEC Higher Nationals within the QCF, NQF and FHEQ

QCF/NQF/ FHEQ level	Progression opportunities and examples of qualifications within each level
8	PhD/DPhil Professional doctorates (credit based), eg EdD
7	Master's degrees Postgraduate diplomas Postgraduate Certificate in Education (PGCE)
6	Bachelor's degrees, eg BA, BSc Professional Graduate Certificate in Education Graduate certificates and diplomas
5	Edexcel BTEC HNDs (Higher National Diplomas) Foundation Degrees, eg FdA, FdSc Diplomas of Higher Education (Dip HE)
4	Edexcel BTEC HNCs (Higher National Certificates) Certificates of Higher Education (Cert HE) Level 4 National Vocational Qualifications (NVQs)
3	Edexcel BTEC Level 3 Extended Diplomas Edexcel BTEC Level 3 Diplomas Edexcel BTEC Level 3 Subsidiary Diplomas Edexcel BTEC Level 3 Certificates GCE Advanced Level Level 3 NVQs Advanced Diplomas

UNITS

The units for the Edexcel BTEC Level 4 HNC Diploma in Automotive Diagnostics and Management Principles (QCF) are on the CD ROM that accompanies this specification and on the Edexcel website.

Contents

Qualification titles covered by this specification	1
Qualification Numbers	1
Introduction	2
Structure of the qualification	2
Edexcel BTEC Level 4 HNC	2
Rules of combination for Edexcel BTEC Level 4 Higher National qualification	3
Key features	5
Professional body recognition	5
National Occupational Standards	6
Qualification Requirement	6
Higher-level skills	6
Edexcel BTEC Level 4 HNC	7
Teaching, learning and assessment	8
Unit format	8
Learning and assessment	10
Overall qualification grade	11
Recognition of Prior Learning	11
Quality assurance of Edexcel BTEC Higher Nationals	12
Programme design and delivery	14
Mode of delivery	15
Resources	15
Delivery approach	16
Access and recruitment	17
Restrictions on learner entry	17
Access arrangements and special considerations	18
Useful publications	19
Professional body contact details	19
How to obtain National Occupational Standards	20
Professional development and training	21
Further information	21
Annexe A	23
Qualification Requirement	23
Annexe B	27
National Occupational Standards	27

Qualification titles covered by this specification

Edexcel BTEC Level 4 HNC Diploma in Automotive Diagnostics and Management Principles (QCF)

This qualification has been accredited to the Qualifications and Credit Framework (QCF). The Qualification Number (QN) for this qualification is listed below.

The qualification title is as it will appear on learners' certificates. Learners need to be made aware of this when they are recruited by the centre and registered with Edexcel. Providing this happens, centres are able to describe the programme of study leading to the award of the qualification in different ways to suit the medium and the target audience.

Centres are reminded that The Report of the National Committee of Inquiry into Higher Education (the Dearing Report) recommended that they '*develop, for each programme they offer, a 'programme specification' which identifies potential stopping-off points and gives the intended outcomes of the programme ...*'

The Quality Assurance Agency for Higher Education (QAA) has produced guidelines for centres in preparing programme specifications (reference *Guidelines for preparing programme specifications: QAA 115 06/06*) which includes related post-Dearing developments. *Annexe 2: Working with programme specifications: a leaflet for further education colleges* of this QAA document contains additional guidance notes to support further education colleges writing programme specifications for Edexcel awards.

Qualification Numbers

The Qualifications and Credit Framework (QCF) code is known as a Qualification Number (QN). Each unit within a qualification will also have a QCF unit code.

The QCF qualification and unit codes will appear on learners' final certification documentation.

The QN for the qualification in this publication is:

600/5636/8 Edexcel Level 4 HNC Diploma in Automotive Diagnostics and Management Principles (QCF)

Introduction

This specification contains the units and associated guidance for the QCF Edexcel BTEC Level 4 HNC Diploma in Automotive Diagnostics and Management Principles (QCF).

Each unit sets out the required learning outcomes, assessment criteria and content and may also include advice regarding essential delivery and assessment strategies.

This document also contains details of the teaching, learning, assessment and quality assurance of these qualifications. It includes advice about Edexcel's policies regarding access to its qualifications, the design of programmes of study and delivery modes.

Structure of the qualification

Edexcel BTEC Level 4 HNC

The Edexcel BTEC Level 4 HNC Diploma in Automotive Diagnostics and Management Principles (QCF) is a qualification with a minimum of 120 credits of which 45 are mandatory core.

The Edexcel BTEC Level 4 HNC programme must contain a minimum of 65 credits at level 4.

Rules of combination for Edexcel BTEC Level 4 Higher National qualification

The rules of combination specify the:

- total credit value of the qualification
- minimum credit to be achieved at the level of the qualification
- mandatory core unit credit
- specialist unit credit
- maximum credit that can be centre devised or imported from other QCF Edexcel BTEC Higher National qualifications.

When combining units for an Edexcel BTEC Higher National qualification it is the centre's responsibility to ensure that the following rules of combination are adhered to:

Edexcel BTEC Level 4 HNC Diploma in Automotive Diagnostics and Management Principles (QCF)

- 1 Qualification credit value: a minimum of 120 credits
- 2 Minimum credit to be achieved at the level of the qualification (level 4): 65 credits.
- 3 Mandatory core unit credit: 30 credits.
- 4 Specialist unit credit: 90 (120–30) credits.
- 5 A maximum of 30 credits can be centre devised or imported from other QCF Edexcel BTEC Higher National qualifications to meet local needs. Level rules and mandatory core units must not be changed.

Structure of the Edexcel BTEC Level 4 HNC Diploma in Automotive Diagnostics and Management Principles (QCF)

Unit number	URN	Mandatory core units – Learners must complete both units for a total of 30 credits	Unit level	Unit credit	GLH
1	H/601/1375	Vehicle Fault Diagnosis	4	15	60
2	T/601/1364	Vehicle Electronics	4	15	60
		Specialist units – Learners must complete units for a total credit value of 90 credits. <u>A minimum of 45 credits must be taken at level 4</u>			
3	D/601/1374	Vehicle Systems and Technology	5	15	60
4	A/601/1494	Engine and Vehicle Design and Performance	5	15	60
5	L/601/1371	Plan and co-ordinate Vehicle Maintenance	5	15	60
6	D/503/1145	Customer Service In Vehicle Operations	4	15	60
7	T/503/1149	Quantitative Techniques for Vehicle Operations	4	15	60
8	L/601/0950	Managing Communications Knowledge and Information	4	15	60
9	J/601/0946	Managing Business Activities to Achieve Results	4	15	60
10	M/601/0908	Working with and Leading People	5	15	60

The Edexcel BTEC Level 4 HNC programme must contain a minimum of 65 credits at level 4.

Key features

Edexcel BTEC Higher Nationals are designed to provide a specialist vocational programme, linked to professional body requirements and National Occupational Standards where appropriate. This qualification forms part of the Higher Apprenticeship framework.

They offer a strong, sector-related emphasis on practical skills development alongside the development of requisite knowledge and understanding.

The qualifications provide a thorough grounding in the key concepts and practical skills required in their sector and their national recognition by employers allows direct progression to employment.

A key progression path for Edexcel BTEC HNC learners is to the second or third year of a degree or honours degree programme, depending on the match of the Edexcel BTEC Higher National units to the degree programme in question.

The Edexcel BTEC HNC in Automotive Diagnostics and Management Principles (QCF) offers a progression route to the professional qualifications offered by the Institute of the Motor Industry (IMI) and has been especially designed for the IMI Level 4 Higher Apprenticeship.

The Edexcel BTEC Higher National in Automotive Diagnostics and Management Principles (QCF) has been developed to focus on:

- the education and training of vehicle operations managers/technicians who are employed at a professional level in a variety of types of management/technical work, such as master/senior technicians or workshop controllers
- providing opportunities for learners to focus on the development of the higher level skills in a technological and management context
- providing opportunities for learners to develop a range of skills and techniques essential for successful performance in working life.

The qualification meets the above aims by:

- developing a range of skills, techniques and personal attributes essential for successful performance in working life, thereby enabling learners to make an immediate contribution to employment at the appropriate professional level
- preparing learners for a range of technical and management careers in the vehicle operations sector
- equipping individuals with knowledge, understanding and skills for success in employment in the automotive retail industry.

Professional body recognition

The Edexcel BTEC Higher National in Automotive Diagnostics and Management Principles (QCF) has been developed with career progression and recognition by professional bodies in mind. It is essential that learners gain the maximum benefit from their programme of study.

Further details of professional body recognition and exemptions for Edexcel BTEC Higher Nationals are given in the *BTEC Higher Nationals – Professional Recognition and Progression Directory 2008* available from our website: www.edexcel.com/quals/hn/Pages/Keydocuments.aspx.

National Occupational Standards

Edexcel BTEC Higher Nationals in Automotive Diagnostics and Management Principles (QCF) are designed to relate to the National Occupational Standards in the Automotive retail sector at level 4, which in turn form the basis of the Institute of the Motor Industry (IMI) National Vocational Qualifications (NVQs). Edexcel BTEC Higher Nationals do not purport to deliver occupational competence in the sector, which should be demonstrated in a work context. However, the qualifications provide underpinning knowledge for the National Occupational Standards, as well as developing practical skills in preparation for work and possible achievement of NVQs in due course.

Some units in the *Edexcel BTEC Higher National in Automotive Diagnostics and Management Principles (QCF)* relate to the Level 4 NOS in Maintenance and Repair, Management and Leadership NOS and the Level 4 NVQ in Business and Administration.

As the knowledge qualification component of the IMI Level 4 Higher Apprenticeship framework this *Edexcel BTEC Higher National in Automotive Diagnostics and Management Principles (QCF)* complements the competence-based Level 4 Certificate in Advanced Automotive Diagnostics and Management Fundamentals (QCF) qualification, which underpins the Level 4 NOS in Maintenance and Repair.

Annexe B contains mapping of the Higher National units in this specification against relevant Level 4 NVQs/competence-based qualifications and NOS where appropriate.

Qualification Requirement

Edexcel has published Qualification Requirements as part of the revision of Edexcel BTEC Higher Nationals. Qualification Requirements set out the aims and rationale of the qualifications and provide the framework of curriculum content. They also identify the higher-level skills associated with the qualifications and any recognition by relevant professional bodies. The Qualification Requirement for the *Edexcel BTEC Higher Nationals in Automotive Diagnostics and Management Principles (QCF)* are given in *Annexe A*.

Edexcel standard specification titles are developed from the Qualification Requirements. Licensed centres comply with Qualification Requirements when developing Higher Nationals under these standard titles.

Qualification Requirements provide consistent standards within the same vocational area and identify the skills and knowledge that can be expected of any holder of an identical Edexcel BTEC Higher National. This will allow higher education institutions, employers and professional bodies to confidently provide progression opportunities to successful learners.

Higher-level skills

Learners studying for *Edexcel BTEC Higher National in Automotive Diagnostics and Management Principles (QCF)* will be expected to develop the following skills during the programme of study. They will learn to:

- analyse, synthesise and summarise information critically
- read and use appropriate information with a full and critical understanding

- think independently, solve problems and devise innovative solutions
- take responsibility for their own learning and recognise their own learning style
- apply subject knowledge and understanding to address familiar and unfamiliar problems
- design, plan, conduct and report on investigations
- communicate effectively, orally and in writing, using a range of media widely found in business
- effectively use communication and information technology for business applications
- perform effectively within a team environment including leadership and team building
- communicate the results of their study and other work accurately and reliably using a range of specialist techniques
- identify and address their own major learning needs within defined contexts and undertake guided, further learning in new areas.
- apply their subject-related and transferable skills in contexts where the scope of the task and the criteria for decisions are generally well defined but where some personal responsibility and initiative is required.

Edexcel BTEC Level 4 HNC

The *Edexcel BTEC Level 4 HNC in Automotive Diagnostics and Management Principles (QCF)* provides a specialist work-related programme of study that covers the key knowledge, understanding and practical skills required in the Automotive retail sector and also offers particular specialist emphasis through the choice of specialist units.

Edexcel BTEC Level 4 HNCs provide a nationally recognised qualification offering career progression and professional development for those already in employment and opportunities to progress into higher education. The qualifications are mode free but they are primarily undertaken by part-time learners studying over two years. In some sectors there are opportunities for those wishing to complete an intensive programme of study in a shorter period of time.

This specification gives centres a framework to develop engaging programmes for higher education learners who are clear about the area of employment that they wish to enter.

The Edexcel BTEC Level 4 HNC in Automotive Diagnostics and Management Principles (QCF) offers a progression route for learners who are employed in the Automotive retail industry.

Learners studying the Edexcel BTEC Level 4 HNC will be able to:

- achieve the knowledge component of the Level 4 Higher Apprenticeship
- progress to the Level 5 Higher Apprenticeship in Automotive Management and Leadership
- progress onto a Foundation degree for example, in Automotive Engineering or Automotive Technology
- progress onto Higher Education (HE) programmes such as MEng and BEng programmes in the Automotive retail industry.

Teaching, learning and assessment

Learners must achieve a minimum of 120 credits (of which at least 65 must be at level 4) on their programme of learning to be awarded an Edexcel BTEC Level 4 HNC.

The assessment of Edexcel BTEC Higher National qualifications is criterion-referenced and centres are required to assess learners' evidence against published learning outcomes and assessment criteria.

All units will be individually graded as 'pass'. To achieve a pass grade for the unit learners must meet the assessment criteria set out in the specifications. This gives transparency to the assessment process and provides for the establishment of national standards for each qualification.

The units in Edexcel BTEC Higher National qualifications all have a standard format which is designed to provide guidance on the requirements of the qualification for learners, assessors and those responsible for monitoring national standards.

Unit format

Each unit is set out in the following way.

Unit title, unit code, QCF level and credit value

The unit title is accredited on the QCF and this form of words will appear on the learner's Notification of Performance.

Each unit is assigned a level, indicating the relative intellectual demand, complexity and depth of study, and learner autonomy. All units and qualifications within the QCF will have a level assigned to them, which represents the level of achievement. There are nine levels of achievement, from Entry level to level 8. The level of the unit has been informed by the QCF level descriptors and, where appropriate, the National Occupational Standards (NOS) and/or other sector/professional benchmarks.

Each unit in Edexcel BTEC Higher National qualifications has a credit value which specifies the number of credits that will be awarded to a learner who has achieved all the learning outcomes of the unit. Learners will be awarded credits for the successful completion of whole units.

Aim

The aim provides a clear summary of the purpose of the unit and is a succinct statement that summarises the learning outcomes of the unit.

Unit abstract

The unit abstract gives the reader an appreciation of the unit in the vocational setting of the qualification, as well as highlighting the focus of the unit. It gives the reader a snapshot of the unit and the key knowledge, skills and understanding gained while studying the unit. The unit abstract also highlights any links to the appropriate vocational sector by describing how the unit relates to that sector.

Learning outcomes

The learning outcomes identify what each learner must do in order to pass the unit. Learning outcomes state exactly what a learner should 'know, understand or be able to do' as a result of completing the unit. Learners must achieve all the learning outcomes in order to pass the unit.

Unit content

The unit content identifies the breadth of knowledge, skills and understanding needed to design and deliver a programme of learning to achieve each of the learning outcomes. This is informed by the underpinning knowledge and understanding requirements of relevant National Occupational Standards (NOS) where appropriate.

Each learning outcome is stated in full and then the key phrases or concepts related to that learning outcome are listed in italics followed by the subsequent range of related topics.

The information below shows how unit content is structured and gives the terminology used to explain the different components within the content.

- Learning outcome: this is given in bold at the beginning of each section of content.
- Italicised sub-heading: it contains a key phrase or concept. This is content that must be covered in the delivery of the unit. Colons mark the end of an italicised sub-heading.
- Elements of content: the elements are in roman text and amplify the sub-heading. The elements must also be covered in the delivery of the unit. Semi-colons mark the end of an element.
- Brackets contain amplification of elements of content which must be covered in the delivery of the unit.
- 'eg' precedes a list of examples used for indicative amplification of an element (that is, the content specified in this amplification that could be covered or that could be replaced by other, similar material).

It is not a requirement of the unit specification that all of the content is assessed.

Learning outcomes and assessment criteria

Each unit contains statements of the evidence that each learner should produce in order to receive a pass.

Guidance

This section provides additional guidance and amplification related to the unit to support tutors/deliverers and assessors. Its subsections are given below.

- *Links* – sets out possible links between units within the specification. Provides opportunities for the integration of learning, delivery and assessment. Links to relevant National Occupational Standards and Professional Bodies Standards will be highlighted here.
- *Essential requirements* – essential, unique physical and/or staffing resources or delivery/assessment requirements needed for the delivery of this unit are specified here.
- *Employer engagement and vocational contexts* – this is an optional section. Where relevant it offers suggestions for employer contact to enhance the delivery of the unit.

These subsections should be read in conjunction with the learning outcomes, unit content, assessment criteria and the generic grade descriptors.

The centre will be asked to ensure that essential resources are in place when it seeks approval from Edexcel to offer the qualification.

Learning and assessment

The purpose of assessment is to ensure that effective learning of the content of each unit has taken place. Evidence of this learning, or the application of the learning, is required for each unit. The assessment of the evidence relates directly to the assessment criteria for each unit, supported by the generic grade descriptors.

The process of assessment can aid effective learning by seeking and interpreting evidence to decide the stage that learners have reached in their learning, what further learning needs to take place and how best to do this. Therefore, the process of assessment should be part of the effective planning of teaching and learning by providing opportunities for both the learner and assessor to obtain information about progress towards learning goals.

The assessor and learner must be actively engaged in promoting a common understanding of the assessment criteria and the grade descriptors (what it is they are trying to achieve and how well they achieve it) for further learning to take place. Therefore, learners need constructive feedback and guidance about how they may improve by capitalising on their strengths and clear and constructive comments about their weaknesses and how these might be addressed.

Assessment instruments are constructed within centres. They should collectively ensure coverage of all assessment criteria within each unit and should provide opportunities for the evidencing of all the grade descriptors.

It is advised that assessment criteria and contextualised grade descriptors are clearly indicated on each assessment instrument to provide a focus for learners (for transparency and to ensure that feedback is specific to the criteria) and to assist with internal standardisation processes. Tasks/activities should enable learners to produce evidence that relates directly to the assessment criteria and grade descriptors.

When centres are designing assessment instruments, they need to ensure that the instruments are valid, reliable and fit for purpose, building on the application of the assessment criteria. Centres are encouraged to place emphasis on practical application of the assessment criteria, providing a realistic scenario for learners to adopt, making maximum use of work-related practical experience and reflecting typical practice in the sector concerned. The creation of assessment instruments that are fit for purpose is vital to achievement and their importance cannot be over-emphasised.

Overall qualification grade

Pass qualification grade

Learners who achieve the minimum eligible credit specified by the rule of combination will achieve the qualification at pass grade.

Recognition of Prior Learning

Recognition of Prior Learning (RPL) is a method of assessment (leading to the award of credit) that considers whether a learner can demonstrate that they can meet the assessment requirements for a unit through knowledge, understanding or skills they already possess and so do not need to develop through a course of learning.

Edexcel encourages centres to recognise learners' previous achievements and experiences whether at work, home and at leisure, as well as in the classroom. RPL provides a route for the recognition of the achievements resulting from continuous learning.

RPL enables recognition of achievement from a range of activities using any valid assessment methodology. Provided that the assessment requirements of a given unit or qualification have been met, the use of RPL is acceptable for accrediting a unit, units or a whole qualification. Evidence of learning must be valid and reliable.

For full guidance about Edexcel's policy on RPL please see our *Recognition of Prior Learning Policy* on our website. Please go to:

[http://www.edexcel.com/Policies/Documents/Recognition of Prior Learning Policy.pdf](http://www.edexcel.com/Policies/Documents/Recognition%20of%20Prior%20Learning%20Policy.pdf)

Quality assurance of Edexcel BTEC Higher Nationals

Edexcel's quality assurance system for all BTEC higher level programmes on the QCF at levels 4–7 will ensure that centres have effective quality assurance processes to review programme delivery. It will also ensure that the outcomes of assessment are to national standards.

The quality assurance process for centres offering Edexcel BTEC higher level programmes on the QCF at levels 4–7 comprises three key components.

1) Approval process

Approval to offer Edexcel BTEC Higher National qualifications will vary depending on the status of the centre.

Centres that have a recent history of delivering Edexcel BTEC Higher National qualifications and have an acceptable quality profile in relation to their delivery will be able to gain approval through Edexcel Online.

Centres new to the delivery of Edexcel BTEC Higher National qualifications will be required to seek approval through the existing Edexcel qualification and centre approval process. Prior to approval being given, centres will be required to submit evidence to demonstrate that they:

- have the human and physical resources required for effective delivery and assessment
- understand the implications for independent assessment and agree to abide by these
- have a robust internal assessment system supported by 'fit for purpose' assessment documentation
- have a system to internally verify assessment decisions, to ensure standardised assessment decisions are made across all assessors and sites.

Such applications have to be supported by the head of the centre (principal, chief executive etc). and include a declaration that the centre will operate the programmes strictly as approved and in line with Edexcel requirements.

2) Monitoring of internal centre systems

Centres will be required to demonstrate ongoing fulfilment of the centre approval criteria over time and across all programmes. The process that assures this is external examination, which is undertaken by Edexcel's external examiners. Centres will be given the opportunity to present evidence of the ongoing suitability and deployment of their systems to carry out the required functions. This includes the consistent application of policies affecting learner registrations, appeals, effective internal examination and standardisation processes. Where appropriate, centres may present evidence of their operation within a recognised code of practice, such as that of the Quality Assurance Agency for Higher Education. Edexcel reserves the right to confirm independently that these arrangements are operating to Edexcel's satisfaction.

Edexcel will affirm, or not, the ongoing effectiveness of such systems. Where system failures are identified, sanctions (appropriate to the nature of the problem) will be applied in order to assist the centre in correcting the problem.

3) Independent assessment review

The internal assessment outcomes reached for all Edexcel BTEC higher level programmes on the Qualifications and Credit Framework at levels 4-7 are subject to an independent assessment review by an Edexcel-appointed external examiner.

The outcomes of this process will be to:

- confirm that internal assessment is to national standards and allow certification

or

- make recommendations to improve the quality of assessment outcomes before certification is released

or

- make recommendations about the centre's ability to continue to be approved for the qualifications in question.

Additional arrangement for ALL centres

Regardless of the type of centre, Edexcel reserves the right to withdraw either qualification or centre approval when it deems there is an irreversible breakdown in the centre's ability to quality assure its programme delivery or its assessment standards.

Quality assurance model for delivery of the qualification within and outside of the Higher Apprenticeship

For the qualification in this specification, the Edexcel quality assurance model will be:

- an annual visit from an Edexcel-appointed external examiner to sample internal verification and assessor decisions for units and to review centre-wide quality assurance systems.

For further details go to the UK BTEC Quality Assurance Handbook 2011-12
<http://www.edexcel.com/quals/BTEC/quality/pages/documents.aspx>

Programme design and delivery

Edexcel BTEC Higher National qualifications consist of mandatory core units and specialist units. The specialist units are designed to provide a specific focus to the qualification. Required combinations of specialist units are clearly set out in relation to each qualification in the defined qualification structures provided in this document.

In Edexcel BTEC Higher National qualifications each unit's credit value usually consists of multiples of 5 credits. Most units are 15 credits in value. These units have been designed from a learning time perspective. **Each 15-credit unit approximates to a learning time of 150 hours.**

The new Edexcel BTEC Level 4 HNCs, which are accredited onto the QCF, will require approximately 480 GLH.

Within the information relating to these units on the QCF, each 15-credit unit has been allocated a figure of 60 GLH to help guide centres (other units with smaller or larger credit values have figures calculated on a pro rata basis). Centres delivering these qualifications are required to use their professional expertise in the design and delivery of these qualifications within the overall guided learning hours for the qualification.

Guided learning hours are defined as all the time when a tutor, trainer or facilitator is present to give specific guidance towards the learning aim being studied on a programme. This definition includes lectures, tutorials and supervised study in, for example, open learning centres and learning workshops. It also includes time spent by staff assessing learners' achievements. It does not include time spent by staff in day-to-day marking of assignments where the learner is not present.

Learning time is defined as the time taken by learners at the level of the unit, on average, to complete the learning outcomes of the unit to the standard determined by the assessment criteria. It should address all learning (including assessment) relevant to the learning outcomes, regardless of where, when and how the learning has taken place.

Centres are advised to consider this definition when planning the programme of study associated with this specification.

Mode of delivery

Edexcel does not define the mode of study for Edexcel BTEC Higher National qualifications. Centres are free to offer the qualification(s) using any mode of delivery that meets the needs of their learners. This may be through traditional classroom teaching, open learning, distance learning or a combination of these. Whatever mode of delivery is used, centres must ensure that learners have appropriate access to the resources identified in the specification and to the subject specialists delivering the units. This is particularly important for learners studying for the qualification through open or distance learning.

Full guidance on our policies on 'distance assessment' and 'electronic assessment' are given on our website.

Learners studying for the qualification on a part-time basis bring with them a wealth of experience that should be utilised to maximum effect by tutors and assessors. Assessment instruments based on learners' work environments should be encouraged. Those planning the programme should aim to enhance the vocational nature of the Edexcel BTEC Higher National qualification by:

- liaising with employers to ensure that the course is relevant to learners' specific needs
- accessing and using non-confidential data and documents from learners' workplaces
- including sponsoring employers in the delivery of the programme and, where appropriate, in the assessment
- linking with company-based/workplace training programmes
- making full use of the variety of experiences of work and life that learners bring to the programme.

Resources

Edexcel BTEC Higher National qualifications are designed to prepare learners for employment in specific industry sectors.

Physical resources need to support the delivery of the programme and the proper assessment of the outcomes and, therefore, should normally be of industry standard.

Staff delivering programmes and conducting the assessments should be familiar with current practice, legislation and standards used in the sector concerned.

Centres will need to meet any specialist resource requirements when they seek approval from Edexcel.

Please refer to the *Essential requirements* section in individual units for specialist resource requirements.

Delivery approach

It is important that centres develop an approach to teaching and learning that supports the specialist vocational nature of the Edexcel BTEC Higher National qualification. Specifications contain a balance of practical skill development and knowledge requirements, some of which can be theoretical in nature. Tutors and assessors need to ensure that appropriate links are made between theory and practice and that the knowledge base is applied to the sector. This will require the development of relevant and up-to-date teaching materials that allow learners to apply their learning to actual events and activities within the sector. Maximum use should be made of the learner's experience.

Access and recruitment

Edexcel's policy regarding access to our qualifications is that:

- qualifications should be available to everyone who is capable of reaching the required standards
- qualifications should be free from any barriers that restrict access and progression
- there must be equal opportunities for everyone wishing to access the qualification.

Centres are required to recruit learners to Edexcel BTEC Higher National qualifications with integrity. This will include ensuring that applicants have appropriate information and advice about the qualifications and that the qualification will meet their needs. Centres should take appropriate steps to assess each applicant's potential and make a professional judgement about their ability to successfully complete the programme of study and achieve the qualification. This assessment will need to take account of the support available to the learner within the centre during their programme of study and any specific support that might be necessary to allow the learner to access the assessment for the qualification. Centres should also show regard for Edexcel's policy (see our website) on learners with particular requirements.

Centres will need to review the profile of qualifications and/or experience held by applicants, considering whether this profile shows an ability to progress to level 4 or level 5 qualifications. For learners who have recently been in education, the entry profile is likely to include one of the following:

- a GCE Advanced level profile which demonstrates strong performance in a relevant subject or an adequate performance in more than one GCE subject. This profile is likely to be supported by GCSE grades at A* to C.
- other related level 3 vocational or academic qualifications
- an Access to Higher Education Certificate awarded by an approved further education institution
- related work experience.

Mature learners may present a more varied profile of achievement that is likely to include extensive work experience (paid and/or unpaid) and/or achievement of a range of professional qualifications in their work sector.

Restrictions on learner entry

The Edexcel BTEC Higher National qualifications are accredited on the QCF for learners aged 18 years and over.

Access arrangements and special considerations

Edexcel's policy on access arrangements and special considerations for BTEC and Edexcel NVQ qualifications aims to enhance access to the qualifications for learners with disabilities and other difficulties (as defined by the Disability Discrimination Act 1995 and the amendments to the Act) without compromising the assessment of skills, knowledge, understanding or competence.

Further details are given on our website (www.edexcel.com).

Useful publications

Further copies of this document and related publications can be obtained from:

Edexcel Publications
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Related publications include:

- the current Edexcel publications catalogue and update catalogue
- Edexcel publications concerning the quality assurance system and the internal and external verification of vocationally-related programmes may be found on the Edexcel website and in the Edexcel publications catalogue.

NB: Most of our publications are priced. There is also a charge for postage and packing. Please check the cost when you order.

Professional body contact details

The Institute of the Motor Industry (IMI)
Fanshaws
Brickendon
Hertford SG13 8PQ

Telephone: 01992 511521
Fax: 01992 511548
Email: imi@motor.org.uk
Website: www.motor.org.uk

How to obtain National Occupational Standards

The related National Occupational Standards for the Edexcel BTEC Level 4 HNC Diploma in Automotive Diagnostics and Management Principles (QCF) can be obtained from:

The Institute of the Motor Industry (IMI)
Fanshaws
Brickendon
Hertford SG13 8PQ

Telephone: 01992 511521
Fax: 01992 511548
Email: imi@motor.org.uk
Website: www.motor.org.uk

CfA business skills @ work
Graphite Square
Vauxhall Walk
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Telephone: 020 7091 9620
Fax: 020 7091 7340
Email: info@cfa.uk.com
Website: [www.cfa.uk. Com](http://www.cfa.uk.Com)

Professional development and training

Edexcel supports UK and international customers with training related to BTEC qualifications. This support is available through a choice of training options offered in our published training directory or through customised training at your centre.

The support we offer focuses on a range of issues including:

- planning for the delivery of a new programme
- planning for assessment and grading
- developing effective assignments
- building your team and teamwork skills
- developing student-centred learning and teaching approaches
- building key skills into your programme
- building in effective and efficient quality assurance systems.

The national programme of training we offer can be viewed on our website (www.edexcel.com/training). You can request customised training through the website or by contacting one of our advisers in the Training from Edexcel team via Customer Services to discuss your training needs.

Our customer service numbers are:

BTEC and NVQ	0844 576 0026
GCSE	0844 576 0027
GCE	0844 576 0025
The Diploma	0844 576 0028
DiDA and other qualifications	0844 576 0031

Calls may be recorded for training purposes.

The training we provide:

- is active – ideas are developed and applied
- is designed to be supportive and thought provoking
- builds on best practice.

Our training is underpinned by the former LLUK standards for those preparing to teach and for those seeking evidence for their continuing professional development.

Further information

For further information please call Customer Services on 0844 576 0026 (calls may be recorded for training purposes) or visit our website at www.edexcel.com.

Annexe A

Qualification Requirement

The Qualification Requirement will be read in conjunction with overarching guidance from Edexcel.

Rationale

The BTEC HNC using the title Automotive Diagnostics and Management Principles should be developed to focus on:

- the education and training of vehicle operations managers/technicians who are employed at a professional level in a variety of types of management/technical work, such as master/senior technicians or workshop controllers
- providing opportunities for learners to focus on the development of the higher level skills in a technological and management context
- providing opportunities for learners to develop a range of skills and techniques essential for successful performance in working life.

Aims of the qualification

The Edexcel BTEC Level 4 HNC in Automotive Diagnostics and Management Principles (QCF) meets the needs of the above rationale by:

- developing a range of skills, techniques and personal attributes essential for successful performance in working life, thereby enabling learners to make an immediate contribution to employment at the appropriate professional level
- preparing learners for a range of technical and management careers in the vehicle operations sector
- equipping individuals with knowledge, understanding and skills for success in employment in the automotive retail industry.

Mandatory curriculum

The mandatory curriculum will give learners the opportunity to build on previous attainment while allowing them to progress and study a selection of optional curriculum. It will display the following features:

- an appreciation of the main aspects of vehicle parts management and the techniques and principles involved in vehicle diagnosis
- advanced aspects of vehicle electronics and computerised systems found on modern vehicles.

Optional Curriculum

The optional curriculum will allow learners to build on learning within the mandatory curriculum. It will display the following features:

- fundamental analytical knowledge and technique used for analysis, modelling and solution of realistic engineering problems with vehicle operations.
- the introduction of concepts and techniques concerned with managing quality in the vehicle operations sector
- an opportunity to experience techniques and processes concerned with managing people and resources

- the skills required for vehicle fleet operations including reporting defects, checking vehicle roadworthiness, maintenance planning and vehicle inspection
- aspects of fleet operation including vehicle costing, charges and maintenance
- an introduction to the main aspects of business law and legislation relating to the vehicle operations sector
- principles of customer service and its management within vehicle operations
- an awareness of the principles of health and safety planning and implementation in a vehicle operations environment.

Entry prerequisites

The fundamental principles of Edexcel's policy are:

- qualifications should be available to everyone who is capable of reaching the required standards
- qualifications should be free from barriers which restrict access and progression
- equal opportunities exist for all

Nevertheless it is the responsibility of the centre to recruit with integrity. Centres should therefore:

- provide applicants with appropriate information and advice
- identify applicants' needs
- select on the basis of each applicant's previous qualifications and experience

Edexcel BTEC Higher National programmes are intended primarily for those who are in, or plan to enter, employment and who have reached the minimum age of 18. Students who enter with at least one of the the following are likely to benefit more readily from the programme:

- a GCE Advanced level profile which demonstrates strong performance in a relevant subject or an adequate performance in more than one GCE subject. This profile is likely to be supported by GCSE grades at A* to C.
- other related level 3 vocational or academic qualifications
- an Access to Higher Education Certificate awarded by an approved further education institution
- related work experience.

Higher level skills and abilities

Learners will be expected to develop the following skills during the programme of study:

- analyse, synthesise and summarise information critically
- read and use appropriate information with a full and critical understanding
- think independently, solve problems and devise innovative solutions
- take responsibility for their own learning and recognise their own learning style
- apply subject knowledge and understanding to address familiar and unfamiliar problems
- design, plan, conduct and report on investigations

- communicate effectively, orally and in writing, using a range of media widely found in business
- effectively use communication and information technology for business applications
- perform effectively within a team environment including leadership and team building
- communicate the results of their study and other work accurately and reliably using a range of specialist techniques
- identify and address their own major learning needs within defined contexts and undertake guided, further learning in new areas.
- apply their subject-related and transferable skills in contexts where the scope of the task and the criteria for decisions are generally well defined but where some personal responsibility and initiative is required.

Annexe B

National Occupational Standards

Mapping against the Edexcel Level 4 Certificate in Advanced Automotive Diagnostics and Management Fundamentals (QCF) competence-based qualification, Level 4 NOS in Maintenance and Repair, NOS in Management and Leadership

The grid below maps the knowledge covered in the Edexcel Level 4 Certificate in Advanced Automotive Diagnostics and Management Fundamentals (QCF) competence-based qualification, Level 4 NOS in Maintenance and Repair, Level 4 NOS in Management and Leadership against the underpinning knowledge of the QCF Edexcel BTEC Higher National in Automotive Diagnostics and Management Principles (QCF)

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10
HNC unit titles										
NOS unit titles and NVQ titles										
Level 4 Certificate in Advanced Automotive Diagnostics and Management Fundamentals:										
MR14K	#	#								
MR14C	#	#								
MR15K		#	#	#				#		
MR15C		#	#	#				#		
MR18K		#	#			#				
MR18C		#	#			#				
AMA02L3					#		#		#	
AMA03L3									#	
AMA05L3										#
Level 4 NOS in Maintenance and Repair:										
LV06	#									

HNC unit titles		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10
NOS unit titles and NVQ titles											
NOS in Management and Leadership:											
M&LA3	Develop your personal networks								#		
M&LB1	Develop and implement operational plans for your area of responsibility									#	
M&LB6	Provide leadership in your area of responsibility								#		
M&LB8	Ensure compliance with legal, regulatory, ethical and social requirements									#	
M&LB11	Promote equality of opportunity and diversity in your area of responsibility								#		
M&LC2	Encourage innovation in your area of responsibility									#	
M&LC4	Lead Change									#	
M&LC5	Plan Change									#	
M&LC6	Implement change									#	
M&LD2	Develop productive working relationships with colleagues and stakeholders								#		#
M&LD3	Recruit, select and keep colleagues										#

HNC unit titles		Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10
NOS unit titles and NVQ titles											
M&LD6	Allocate and monitor the progress and quality of work in your area of responsibility										#
M&LD7	Provide learning opportunities for colleagues										#
M&LD10	Reduce and manage conflict in your team										#
M&LE6	Ensure health and safety requirements are met in your area of responsibility									#	
M&LE10	Take effective decisions								#		
M&LF3	Manage business decisions								#	#	

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