

## **CHESTERFIELD COLLEGE**

**Directorate of Business, Travel, Tourism and  
Computing**

### **Programme Specification**

**Edexcel BTEC L4 HNC Diploma CBE**

**Edexcel BTEC L4 HNC Diploma CBE (Civil  
Engineering)**

**Edexcel BTEC L5 HND Diploma CBE**

**Updated 2011**

## PROGRAMME SPECIFICATION

1. Qualification to be awarded	2. Sub-Awards
Edexcel BTEC L4 HNC Construction and the Built Environment  Edexcel BTEC L4 HNC CBE (Civil Engineering)  Edexcel BTEC L5 HND Construction and the Built Environment	Edexcel BTEC L4 HNC Construction and the Built Environment

3. Directorate responsible for this programme	4. Programme Manager	5. Other Directorates contributing to this programme
Higher Business Directorate of Business, Travel, Tourism and Computing	Bill Esmond	Directorate of CBE

6. Other institutions contributing to this programme	7. Date programme first offered
None	<ul style="list-style-type: none"> <li>• L4 HNC CBE September 1982</li> <li>• L4 HNC CE September 2008</li> <li>• L5 HND CBE September 2009</li> </ul>

8. Study mode	9. Duration
PT FT	2 years 2 years

10. Structure of the Qualifications
<p><b>Edexcel BTEC Level 4 HNC</b></p> <p>The Edexcel BTEC Level 4 HNC in Construction and the Built Environment provides a specialist work-related programme of study that covers the key knowledge, understanding and practical skills required in the construction and built environment sector and also offers particular specialist emphasis through the choice of specialist units.</p> <p>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.</p> <p>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.</p> <p>The Edexcel BTEC Level 4 HNC in Construction and the Built Environment offers a progression route for learners who are employed in the construction and built environment sector. Learners studying the Edexcel BTEC Level 4 HNC will be able to progress onto further studies for example HND in Construction and the Built Environment or a related degree.</p>

## **Edexcel BTEC Level 5 HND**

The Edexcel BTEC Level 5 HND provides greater breadth and specialisation than the Edexcel BTEC Level 4 HNC. Edexcel BTEC HNDs are mode free but are followed predominately by full-time learners. They allow progression into or within employment in the beauty sector, either directly on achievement of the award or following further study to degree level.

The Edexcel BTEC Level 5 HND in Construction and the Built Environment provides opportunities for learners to apply their knowledge and practical skills in the workplace. Full-time learners have the opportunity to do this through formal work placements or part-time employment experience.

The qualification prepares learners for employment in the construction and built environment sector and will be suitable for learners who have already decided that they wish to enter this area of work. Some adult learners may wish to make the commitment required by this qualification in order to enter a specialist area of employment in construction and the built environment or progress into higher education. Other learners may want to extend the specialism that they followed on the Edexcel BTEC Level 4 HNC programme.

## **Edexcel BTEC Level 4**

### **HNC Diploma in Construction and the Built Environment**

- Qualification credit value: a minimum of 120 credits. (A maximum of 65 credits may be at level 3; a maximum of 55 credits may be at level 5.)
- Minimum credit to be achieved at the level of the qualification (level 4): 65 credits.
- Mandatory core unit credit: 65 credits.
- Specialist unit credit: 55 credits.
- 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.

### **HNC Diploma in Construction and the Built Environment (Civil Engineering)**

- Qualification credit value: a minimum of 120 credits. (A maximum of 30 credits may be at level 3; a maximum of 55 credits may be at level 5.)
- Minimum credit to be achieved at the level of the qualification (level 4): 65 credits.
- Mandatory core unit credit: 125 credits.
- Specialist unit credit: 0 credits.
- 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.

## **Edexcel BTEC Level 5**

### **HND Diploma in Construction and the built Environment**

- Qualification credit value: a minimum of 240 credits. (A maximum of 30 credits may be at level 6.)
- Minimum credit to be achieved at the level of the qualification (level 5): 125 credits.
- Mandatory core unit credit: 95 credits.
- Specialist unit credit: 145 credits.
- The requirements of the HNC have to be met
- A maximum of 60 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

### **HND Diploma in Construction and the built Environment (Civil Engineering)**

- Qualification credit value: a minimum of 240 credits. (A maximum of 30 credits may be at level 6.)

- Minimum credit to be achieved at the level of the qualification (level 5): 125 credits.
- Mandatory core unit credit: 155 credits.
- Specialist unit credit: 85 credits.
- The requirements of the HNC have to be met
- A maximum of 60 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

<b>11a) Structure of the Edexcel BTEC Level 4 HNC in Construction and the Built Environment</b>				
<b>Unit Number</b>	<b>Mandatory core units all three units must be taken</b>	<b>Unit level (4)</b>	<b>Unit level (5)</b>	<b>Unit credit</b>
<b>1</b>	Design Principles and Application for Construction and the Built Environment	4		15
<b>2</b>	Science and Materials for Construction and the Built Environment	4		15
<b>5</b>	Group Project in the Construction Industry		5	20
<b>6</b>	Health and Safety and Welfare for Construction and the Built Environment	4		15
	<b>Specialist units group A – choose units with a minimum credit value of 55 credits</b>			
<b>7</b>	Construction and Maintenance of Buildings	4		15
<b>11</b>	Contractual Procedures and Procurement for Construction and the Built Environment		5	15
<b>13</b>	Environmental Impact of Construction	4		15
<b>27</b>	Site Surveying Procedures for Construction and the Built Environment	4		15
	<b>Total</b>	<b>90@L4</b>	<b>35@L5</b>	<b>125</b>

<b>11b) Structure of the Edexcel BTEC Level 4 HNC in Construction and the Built Environment (Civil Engineering)</b>				
<b>Unit Number</b>	<b>Mandatory core units all eight units must be taken</b>	<b>Unit level (4)</b>	<b>Unit level (5)</b>	<b>Unit credit</b>
<b>1</b>	Design Principles and Application for Construction and the Built Environment	4		15
<b>2</b>	Science and Materials for Construction and the Built Environment	4		15
<b>3</b>	Applied Mathematics for Construction and the Built Environment	4		15
<b>5</b>	Group Project in the Construction Industry		5	20
<b>27</b>	Site Surveying Procedures for Construction and the Built Environment	4		15
<b>32</b>	Engineering Geology and Soil Mechanics	4		15
<b>33</b>	Civil Engineering Technology	4		15
<b>34</b>	Structural Analysis and Design		5	15
	<b>Total</b>	<b>90@L4</b>	<b>35@L5</b>	<b>125</b>

<b>11c) Structure of the Edexcel BTEC Level 5 HND in Construction and the Built Environment</b>				
<b>Unit Number</b>	<b>Mandatory core units all six units must be taken</b>	<b>Unit level (4)</b>	<b>Unit level (5)</b>	<b>Unit credit</b>
1	Design Principles and Application for Construction and the Built Environment	4		15
2	Science and Materials for Construction and the Built Environment	4		15
3	Applied Mathematics for Construction and the Built Environment	4		15
4	Management Principles and Application for Construction and the Built Environment		5	15
5	Group Project in the Construction Industry		5	20
6	Health and Safety and Welfare for Construction and the Built Environment	4		15
	<b>Specialist units choose units with a minimum credit value of 145 credits</b>			
7	Construction and Maintenance of Buildings	4		15
8	Technology of Complex Buildings		5	15
11	Contractual Procedures and Procurement for Construction and the Built Environment		5	15
12	Conversion and Adaptation of Buildings		5	15
13	Environmental Impact of Construction	4		15
19	Building Control Procedures and Legislation		5	15
22	Structural Behaviour and Detailing	4		15
27	Site Surveying Procedures for Construction and the Built Environment	4		15
60	Personal and Professional Development		5	15
63	Work-based Experience		5	15
	<b>Total credit</b>	<b>120</b>	<b>125</b>	<b>245</b>
	<b>HNC (Level4)</b>	<b>90@L4</b>	<b>35@L5</b>	<b>125</b>
	<b>Additional units</b>	<b>30@L4</b>	<b>90@L5</b>	<b>120</b>

## 12. Unit specifications

[Link to Higher National unit specifications at www.edexcel.com](http://www.edexcel.com)

## 13. Credit transfer arrangements

Credits obtained at another Higher Education institution may be taken into account, subject to College approval.

## 14. Main aims and distinctive features of the programme

Edexcel BTEC Higher Nationals are designed to provide a specialist vocational programme, linked to professional body requirements and National Occupational Standards where appropriate. 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 and HND 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.

Edexcel BTEC Higher Nationals in Construction and the Built Environment have been developed to focus on:

- national qualifications, with detailed common standards, learning outcomes and unit grading recognisable to centres, learners, employers and professional bodies
- recognition by the appropriate professional bodies
- a common core of study applicable to the construction and the built environment sector
- a choice of optional specialist curriculum studies appropriate to the main career disciplines with in construction, building services engineering and civil engineering
- a flexible approach to curriculum content within a nationally recognised framework
- changing training and educational needs relevant to construction, building services, engineering and civil engineering disciplines
- progression to degree programmes and professional body membership
- contributing to the knowledge, understanding and skills required to underpin relevant National Occupational Standards and NVQs at level 4 and 5
- providing opportunities for learners to focus on the development of higher-level skills in a technological and management context
- the development of learners' practical knowledge, understanding and skills that underpin performance in the workplace
- preparation for employment and further training and professional development

These qualifications meet the needs of the above rationale by:

- preparing learners for a range of technical, professional and management careers in construction and the built environment by providing specialised studies which are directly related to individual occupations and professions learners are currently working in or in which they intend to seek employment
- enabling learners to make an immediate contribution in employment in the construction and built environment sector
- providing learners with flexibility, knowledge, understanding, skills and motivation as a basis for progression to graduation and postgraduate studies
- developing a range of skills and techniques, personal qualities and attitudes essential for



- successful performance in working life
- providing further study, career development and progressions from a Technical Certificate at level 3 within or following an Advanced Apprenticeship
- providing a significant education base for progression to membership of professional bodies in construction, building services engineering and civil engineering
- providing a significant education base for progression to incorporated Engineer level.

### Higher-level skills

Learners studying for Edexcel Higher National in Construction and the Built Environment will be expected to develop the following skills during the programme of study;

- locate, extract, read and use appropriate literature drawn from multiple sources with a full and critical understanding
- design, plan, conduct and report investigations and research to solve problems and communicate the results of their study accurately and reliably
- seek solutions to routine and unfamiliar problems through the analysis and synthesis of a range of concepts, knowledge and skills to formulate evidence-based arguments and evaluate and summarise information critically
- analyse and interpret data and present quantitative and qualitative information, together with analysis, argument and commentary, in a form appropriate to the intended audience, using appropriate quantitative techniques, relevant IT software and media
- relate academic knowledge, skills and understanding to skills in the workplace and, where appropriate, demonstrate their integration through workplace experience and activities
- think independently and apply complex theories to practical, realistic work situations, some requiring innovation and creativity
- 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 are required
- recognise the moral and ethical issues of construction, sustainability, the environment, and scientific enquiry and experimentation
- appreciate the need for ethical standard and professional codes of conduct and apply insight and judgement in relation to the margins and consequences of error
- develop an understanding of the interdisciplinary nature of construction, and of the skills required to work in non-adversarial integrated teams.
- take responsibility to manage and direct their own and, where appropriate, the activities of others
- identify and address their learning needs within defined contexts, recognise their learning style and undertake further guided learning in new areas.

The Construction Industry Council has an agreed set of Common Learning Outcomes for all sub-degree and degree level courses, these are summarised in Annexe B of the Edexcel Specification.

### 15. Entry requirements and admissions policy

Applications to the HNC/D programme are made through direct application to the college. All applicants will be offered an interview.

Entry requirement to HNC/D in Electrical and Electronic Engineering is one of the following:

- BTEC Level 3 Diploma or Certificate in Construction
- BTEC Level 3 Extended Diploma Construction
- A minimum of 1 A Level in a related subject
- An advanced vocational qualification such as a BTEC National
- NVQ or Advanced Apprenticeship in a construction related area

NOTE: MERIT or DISTINCTION grades are required at Level 3 to progress onto the course. For mature students practical experience will also be taken into consideration.

## **16. Teaching and Learning methods and Assessment Strategies for the Learning Outcomes of unit specifications**

### **Teaching and Learning Methods**

The role of the tutor at Chesterfield College is to provide learning opportunities and academic and professional support and guidance, rather than just to transmit knowledge. In higher education teachers are required to clearly match teaching, learning and assessment to explicit learning outcomes. Teachers will also actively develop collaborative and cooperative learning strategies to develop students' confidence in engaging with their subject and be able to apply that learning in a work context.

All Higher Education programmes in the college will enhance the quality of teaching and learning by adopting the following principles

- student-centred learning
- active and experiential learning strategies
- developing reflective practitioners with evaluative skills
- promoting lifelong learning and progression

The Course team will aim to:

- Utilise a variety of teaching and assessment methods
- Make learning materials and interactive forums available through the VLE to support a culture of continuous learning (blended learning)
- Ensure that teaching and learning supports assessment that include formative and summative elements
- Ensure that teaching and assessment enable students to meet the programme learning outcomes
- Develop self-directed and independent learners with a thirst for life-long learning
- Enable students to develop transferable and professional skills
- Work with stakeholders to ensure that students' learning experiences enhance employability and career prospects
- Ensure assessment practice facilitates the maintenance of academic standards

### **Assessment Strategy**

The course team will utilise a range of assessment methods including reports, presentations, portfolios, journals, projects, time constrained assessments and practical activities.

Assessments are designed to ensure that the identified learning outcomes for each unit are assessed and that modules address the overall programme learning outcomes. The assignments will assess and develop knowledge and understanding as well as transferable/key skills. Tutors should give an indication of the word tariff for each piece of assessed work i.e. how much work you are expected to produce. As a general rule for a module you would be expected to produce 3,000 words for a unit credit value of 15.

Wherever possible students will be given documented formative feedback on assessment to enable them to improve and develop their skills. Students will be encouraged to reflect upon their own performance, identify their own learning and development needs throughout the course, with the tutor acting as a facilitator. Work place mentors, usually your line manager or placement supervisor, may act as a partner in this learning process. Students and their work place mentor are encouraged to identify real life projects and briefs that form the basis of work related learning

assessments and promote action learning.

### **Grading Criteria**

Assessed work will be graded according to the learning outcomes of each individual unit. In order to pass a unit a student must produce evidence that they have achieved the outcomes/ criteria for the unit. This is done via assignment work and class based activities. Once a student has achieved the learning outcomes for the unit, they are deemed to have passed the unit. The quality of the assessed work will determine the classification/grade obtained for that unit. Unit tutors should provide copies of the learning outcomes and assessment criteria for each unit; all marks and grades are provisional until approved by the appropriate Examination Board. The grading of Edexcel BTEC Higher National qualifications is at the unit and the qualification level. Each successfully completed unit will be graded as a pass, merit or distinction. A pass is awarded for the achievement of all outcomes against the specified assessment criteria. Merit and distinction grades are awarded for higher-level achievement.

<b>Points range</b>	<b>Grade</b>	
0-74	Pass	P
75-149	Merit	M
150	Distinction	D

### **17. Assessment methods used and rationale**

Assessment activities throughout the programme are intended to develop generic skills. The group project and individual learner project brings together many of these generic skills by allowing students to specify and plan their project activities, investigate, analyse and design alternative solutions, critically evaluate academic material and assess their personal performance.

### **18. Methods for evaluating and enhancing quality and standards of this programme**

Procedures for maintaining standards include:

- ongoing internal verification throughout the programme;
- consideration of relevant external examiners' reports;
- contributions at the Examination Board meetings;
- analysis of entry and exit qualifications, progression and completion rates;
- scrutiny of standards by the College Quality Unit via annual programme reports, required responses to external examiners' reports;
- review by the QAA;
- input from industry and the profession, via accreditation processes, and the variety of professional activities of team members
- input from employers via students and their projects;
- student feedback from learner unit evaluations, learner surveys, class representatives, student focus groups;
- a programme of lesson observations and feedback to team members;

### **19. Student support and guidance arrangements**

Students are assigned a personal tutor for the duration of the course who is there to advise and guide on issues relating to:

- pastoral support
- assignment support

- provision of non-specialist information regarding careers advice
- Assignment guidelines
- Assessment strategies

Students are encouraged to use their tutor to help and guide during their time at the college. Tutors have substantial experience in dealing and helping students who experience difficulties from time to time.

### **Students with Learning Disabilities**

The College is committed to equal opportunities. Should students require any support to be made available they advise the course tutor who will initially discuss the problem and ways of helping or arrange a meeting with the college's support staff.

Chesterfield College is committed to provide equality and diversity for everybody in all its activities. The College seeks to ensure that every student or member of staff, present or potential, is treated equally, regardless of age, gender, sexual orientation, class or family circumstances, disability, learning difficulty, colour, ethnic origin or nationality, political or religious beliefs or criminal record (except where the law makes special provision). [Please refer to the College Equality Policy](#)

<b>20. Teaching Staff</b>		
	Name	Directorate
Programme Manager	Bill Esmond	Business, Travel Tourism and Computing
Teaching Staff	Phil Goulding Tom Burscough Debra Heath	BTTC CBE CBE

<b>21. Programme regulations</b>
Please refer to the College Handbook section 2 on Assessment for Edexcel HN courses.
Regulations for the scheme may be found at : <a href="http://www.edexcel.org.uk">http://www.edexcel.org.uk</a>