

## Programme Specification

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

**Date of Publication to Students: September 2015**

**NOTE:** This specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if s/he takes advantage of the learning opportunities that are provided. More detail on the specific learning outcomes, indicative content and the teaching, learning and assessment methods of each module can be found in the Module Specifications and in the Course Handbook.

The accuracy of the information contained in this document is reviewed by the College and may be checked within independent review processes undertaken by the Quality Assurance Agency

<b>Awarding Body:</b>	Pearson/Edexcel
<b>Teaching Institution:</b>	Birmingham Metropolitan College
<b>Interim Awards and Final Award:</b>	<p><b>Final Award:</b> HNC (Construction and the Built Environment)</p> <p><b>Fall back Award:</b> Certificate of Unit Completion</p>
<b>Programme Title:</b>	HNC in Construction and the Built Environment
<b>Main fields of Study:</b>	Construction and the Built Environment
<b>Modes of Study:</b>	Part-time, day release
<b>Language of Study:</b>	English
<b>UCAS Code:</b>	Not applicable
<b>JACS Code:</b>	

**Professional Status of the programme (if applicable):**

Not applicable although students will be encouraged to register for student membership of one of the following; Chartered Institute of Building (CIOB), Royal Institution of Chartered Surveyors (RICS) or Chartered Institute of Architectural Technologists (CIAT).

**Relevant subject benchmark statements and other external reference points used to inform programme outcomes:**

The course aims, as set out in the programme specifications, are consistent with the QAA benchmarking statements, FHEQ level descriptors, the Degree Awarding Body descriptors and the College mission statement.

**Programme philosophy and aims**

The HNC in Construction and the Built Environment has been developed to meet the training needs of those employed or interested in a career in the construction industry. At Level 4, students will study a range of modules totalling 120 credit points and is equivalent to first year of a full time university honours degree. The programme will provide progression directly to 3<sup>rd</sup> year of a part time honours degree programme in construction related fields.

A similar programme has been running at this institution since 2007 and has continuously attracted a good number of students employed in a range of construction sectors such as site managers, surveyors, rail industry, social housing providers, architectural technicians, steel and timber frame design and supply, building services engineering, and civil engineering.

The College has excellent relationships with a range of major local, national and international companies who each year send their trainees to study on our HNC in Construction and the Built Environment. It is expected that over 90% of the students studying on the programme will be employed in the industry and sponsored by their employer.

Having completed their HNC, a good number of students have traditionally progressed and completed a top-up to full honours degree at local universities.

The content of the programme has been influenced by a range of employers.

The course modules have been chosen to be relevant to a wide range of disciplines within the industry; these include Design Principles, Environmental Impact, Health Safety & Welfare, Science and Materials, Management Principles, and Surveying. Supplementary to these are a range of study skills and support sessions aimed at maximising success and broadening horizons. All modules will have direct application in the workplace and in year 2 students will undertake a group project related to the industry by implementing a 'start to finish' construction project.

The College has for many years been equipped with practical resources to support the study of Construction. And links to the University of Wolverhampton has meant that students can access the University's high quality laboratories. The campus also has a number of general IT rooms and a good Learning and Resource Centre.

**The aims of the programme are to:**

- Prepare 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
- Enable learners to make an immediate contribution in employment in the construction and built environment sector
- Provide learners with flexibility, knowledge, understanding, skills and motivation as a basis for progression to graduate and postgraduate studies
- Develop a range of skills and techniques, personal qualities and attitudes essential for successful performance in working life
- Provide further study, career development and progression from a Technical Certificate at level 3 within or following an Advanced Apprenticeship
- Provide a significant education base for progression to membership of professional bodies in construction, building services engineering and civil engineering
- Provide a significant education base for progression to Incorporated Engineer level

**Intended learning outcomes and the means by which they are achieved and demonstrated:**

**Learning Outcomes**

1. Understand the planning and design phases of the construction process
2. Understand the factors that affect the specification of materials and building services
3. Understand how environmental factors affect the planning and design phases of the construction process
4. Understand how the roles and responsibilities of all parties involved in construction projects
5. Understand how technology affects the design and production phases of construction projects
6. Understand the properties and use of construction materials
7. Understand the structural behaviour of construction materials
8. Be able to apply scientific principles to the design and use of buildings
9. Be able to solve scientific problems in construction and the built environment
10. Understand the health, safety and welfare legislation applicable to the construction and built environment sector
11. Understand the main requirements of an effective health and safety policy
12. Understand hazard and risk identification in design and construction
13. Understand the need to review, revise and monitor risk assessments
14. Be able to undertake risk assessments
15. Be able to formulate the project
16. Be able to implement the project within agreed procedures and to specification
17. Be able to evaluate the project outcomes
18. Be able to present the project outcomes
19. Understand the evolution of management principles and their application to the construction and built environment sector
20. Understand the construction and built environment sector in terms of structures and activities
21. Understand management techniques used in the construction and built environment sector
22. Understand the methods of procurement and contracting used in the construction and built environment sector
23. Understand the principles of site surveying
24. Be able to use site surveying instruments
25. Understand cartographic detailing of construction works
26. Understand the software available for site surveying
27. Understand how the construction and built environment sector impacts on the environment
28. Understand the local environmental impact of the construction and built environment sector
29. Understand the global environmental impact of the construction and built environment sector
30. Understand the indoor environmental impact of the construction and built environment sector
31. Understand environmental assessment systems in common use
32. Be able to devise a project scope and scheme of work
33. Be able to implement the scheme of work
34. Be able to evaluate the group project
35. Be able to present the group project

## **Learning teaching, and assessment methods used**

### Teaching methods

The following teaching methods will be used:

1. Formal Lecture with student participation, group tutorials, one-to-one tutorials, practical experimentation, problem solving, case studies, project, guided self-study and research.
2. The vast majority of students will be employed in the industry and will also benefit from work-based learning and putting skills and practices gained on the programme into action, directly in their job role. The individual student project requires that students produce a professional report and deliver an oral presentation to staff and peers.

### Summative Assessment Methods

A range of summative assessments will be used including assignments, time controlled open book assignments, project report and oral presentation.

Many modules have several types of summative assessment such as assignment, while some of the highly practical modules are assessed entirely by coursework. The assessment strategy provides a balance between the different assessment methods.

### Formative Assessment Methods

Students will undertake range of activities throughout the course and receive tutor feedback both verbally and in writing. This will include; practical experimentation, completion of worksheets, case studies and directed study.

## Programme structure and requirements, levels, modules, credits and awards

### Programme Modules, Level and Credit Values

#### Year 1

	Level	Credits
Unit 1: Design principles and application for construction and the built environment	4	15
Unit 2: Science and materials for construction and the built environment	4	15
Unit 6: Health, safety and welfare for construction and the built environment	4	15
Unit 61: Project design, implementation and evaluation	5	20
<b>Total credits</b>		65

#### Year 2

	Level	Credits
Unit 4: Management principles and application for construction and the built environment	5	15
Unit 27: Site surveying procedures for construction and the built environment	4	15
Unit 13: Environmental impact of construction	4	15
Unit 5: Group project in the construction industry	5	20
<b>Total credits</b>		65

**Total Credit required for Award of HNC = 120**

## Course Structure

				Semester	Level
<b>Stage 2 Study</b>					
Unit 4 Management Principles (15 Credits)	Unit 27 Site Surveying (15 Credits)	Tutorial Support session		1	4
Unit 13 Environmental Impact (15 Credits)	Unit 5 Group Project (20Credits)	Tutorial Support session		2	4/5
<b>Stage 1 Study</b>					
Design Principles and Application (15 Credits)	Health Safety & Welfare (15 Credits)	Tutorial Support session		1	4
Science and Materials (15 Credits)	Student Research Project (20 Credits)	Tutorial Support session		2	4/5

The individual project will be delivered mainly by research and development in the student's place of work, supported by formal group tutorials and one to one tutorials with their personal tutor or mentor.

Students who are not employed will agree a suitable project with their tutor.

All the above units (except core) are subject to change due to staffing availability, skills and experience.

## **Support for Learning including Personal Development Planning (PDP)**

Students are encouraged to identify and, with guidance, to reflect on their own learning needs and are offered the following support as appropriate to meet those needs:

- An induction programme providing dissemination of essential information.
- A Learning and Resource Centre providing access to a variety of learning resources, with support from staff
- A Student Handbook containing important information including tutors, staff responsibilities, contacts and regulations and requirements of the course.
- Access to the College IT facilities
- Access to the College Student Services and Careers Advisor
- Access to a Student Counsellor
- Regular group tutorial sessions
- One-to-one tutorials arranged on request
- Consultation with tutor by email, telephone, VLE and other electronic sources

Students will produce their own Personal Development Plans and have periodic reviews with their Personal Tutor.

### **Criteria for admission**

Candidates must satisfy the general admissions requirements of the programme, which are as follows:

Candidates should have the following:

- 5 GCSEs at grade C or above to include English, Science and Mathematics.
- Plus One A Level or equivalent vocational A Level in Mathematics or a science based subject at Grade D or above.  
or
- Advanced GNVQ pass in a relevant discipline.  
or
- Edexcel Diploma/Extended Diploma or NVQ Level 3 pass in a relevant discipline.  
or
- Advanced Modern Apprenticeship pass in a relevant discipline.  
or
- Mature Applicants (21+) with relevant experience will also be considered, subject to interview and acceptance is at the discretion of the college.

International candidates for which English is not a first language should have an IELTS score of 6.0 or higher in addition to the above entry requirements.

Equivalent qualifications to the above are acceptable and industrial experience will be taken into account. Successful application is subject to an Entry Interview.



## **Methods for evaluation and enhancement of quality and standards including listening and responding to views of students**

The quality of the programme will be closely monitored by all staff involved in its delivery. The Departmental Manager is the local Manager who will oversee the delivery of the programme, the Head of Faculty for Higher Education and the College Director of Quality, monitor the overall effectiveness and quality through a robust College-wide quality control process. The programme will also adhere to BTEC regulations and processes.

The College quality process applied to this programme includes:

- Regular teaching observations and reviews
- Staff skills updating as required
- Regular delivery team meetings
- Standardisation meetings and thorough internal verification process
- Programme management meetings involving student representatives and course delivery team
- Seeking of student views during group tutorials, one to one tutorials and by formal College survey completion and national surveys.
- Termly Review Boards to review course performance on a regular basis.
- Production of programme Annual Monitoring Reports which detail the performance of the students and programme.
- End of module/programme Examination Boards, attended by the course team and records kept.
- A robust system for dealing with complaints or issues, should they arise.

Students will have regular opportunities to present their views to subject tutors during taught sessions, during tutorials and during one-to-one tutorials (by appointment). They will also be able to express their views to the Departmental Manager (by arranged appointment) and also express their views via the student Course Representative who will convey views to the course team, at termly Programme Management Meetings.

The Programme Management Meetings are attended by the course team, student representatives and where possible an employer. Minutes of the meeting are recorded and an action log produced.

Students are expected to complete regular quality surveys, both internal and external Higher Education Surveys.