Programme Specification

Programme Title: Higher National Certificate (HNC) in Construction & Surveying

Awarding Institution:	University of Bolton
Teaching Institution:	University of Bolton
Division and/or Faculty/Institute:	Faculty of Advanced Engineering & Sciences

Professional accreditation	Professional body	Professional body URL	Status of graduates
	NA	NA	NA

Final award(s):	Higher National Certificate
Interim award(s)	None
Exit or Fallback award(s)	
Programme title(s)	Construction & Surveying
UCAS Code	K200
JACS Code	K200
University Course Code(s)	N/A at the moment
QAA Benchmark Statement(s)	Construction Property & Surveying
Other internal and external reference points	None
Language of study	English

Mode of study and normal   Part Time Day Release – 2 Academic years
period of study   Part Time Evening only - 2- Academic years

Admissions criteria
- Five GCSEs at grade C or above (or equivalent) including English, mathematics and science **and**

- A Levels accumulating to the satisfactory number of UCAS tariff points. The total may include points from AS Levels, **or**
- EDEXCEL (BTEC) Qualifications – Merit in Subsidiary Diploma (formerly National Award), **or**
- EDEXCEL (BTEC) Qualifications – Merit / Pass in Diploma (formerly National Certificate), **or**
- EDEXCEL (BTEC) Qualifications – Pass in Extended Diploma (formerly National Diploma), **or**

- NVQ - Pass NVQ Level 3 or equivalent qualification in craft or administrative studies.

Non Standard Entry
- Cases dealt with by admissions tutor on individual basis for mature students who have a proven employment record within the construction industry.

- Applicants may be invited for interview as part of the selection process.

- If English is not the first language – the minimum IELTS score for overseas students is at least 6.0 (or equivalent).

Additional admissions matters
- Applicants should ideally be employed within the construction industry or actively seeking employment in the industry.

Fitness to practise declaration
Not applicable

Aims of the programme

The principal aims of the programme are to:
1. develop knowledge and understanding of construction and surveying principles and activities;
2. develop knowledge and understanding of environmental and health and safety risks related to construction activities and disciplines;

3. develop an awareness and understanding of the legal and sustainable frameworks in which the construction industry operates;

4. enhance and develop skills and competences to perform at higher technician level in a broad range of construction disciplines within the construction and surveying industry;

5. prepare for higher level studies at HE5/HE6 level, lifelong learning and membership of a relevant professional body at appropriate level.

Distinctive features of the programme

- Vocationally oriented programme leading to employment opportunities in a variety of construction industry disciplines e.g. architectural technology, building surveying, site management, estimating, quantity surveying, buying and site engineering.

- The HNC programme makes extensive use of laboratory and field-based work to underpin theoretical concepts in construction and surveying.

- A current and vocational programme with an established excellent local and regional reputation in the construction industry.

- The programme includes an integrated project which develops and enhances group work activities on a live project brief in year 2 of the course.

- The programme makes use of local site visits (and more recently to larger profile projects such as the Olympics construction site in London). Guest speakers from industry provide specialist lectures.

- Students are encouraged to join professional bodies such as the Chartered Institute of Building, Association of Building Engineers, Chartered Institute of

Architectural Technologist and the Royal Institute of Chartered Surveyors at student level of membership. On completing the HNC qualification students can seek to gain higher grade memberships at Associate and Technician levels within a relevant professional body.

Programme learning outcomes:

- use a range of established techniques to initiate and undertake critical analysis of information, and to propose solutions to well-defined problems arising from that analysis in their field of study or work context;

- effectively communicate information, arguments and analysis in a variety of forms to specialist and non-specialist audiences, and deploy key techniques of the discipline effectively in their field of study and in a work context;

- undertake further training, develop existing skills and acquire new competences that will enable them to assume responsibility within organisations;

- demonstrate qualities and transferable skills necessary for employment and progression to other qualifications requiring the exercise of personal responsibility and decision-making.

K. Knowledge and understanding

On completion of the programme successful students will be able to demonstrate systematic knowledge and understanding of:

1. construction methods and techniques;

2. the duties and responsibilities for safe working;

3. environmental, social, economic and legal factors that impact on the construction industry;

4. the use and application of appropriate management theories and techniques.

C. Cognitive, intellectual or thinking skills

On completion of the programme successful students will be able to demonstrate the ability to:

1. define a given problem and identify appropriate solution tools and techniques;

2. display the capacity for critical reasoning;

3. synthesise and analyse information;

4. apply suitable and appropriate mathematical and scientific principles and methods.

P. Practical, professional or subject-specific skills

On completion of the programme successful students will be able to demonstrate the ability to :

1. manage resources, time and work within a team;

2. manage the implementation of elements of construction projects and processes;

3. develop discipline specific skills;

4. communicate effectively with individuals and organisations across both the public and private sectors regarding construction projects;

5. understand and be able to use relevant materials, equipment and processes.

T. Transferable, key or personal skills
On completion of the programme successful students will be able to demonstrate the ability to:

1. communicate effectively both orally and in writing;

2. demonstrate the capacity to research, investigate, work with contradictory information and to learn;

3. use information technology tools effectively;

4. show the capacity for insight, creativity and innovation;

5. demonstrate social and political awareness;

6. demonstrate numerical and verbal reasoning skills.

The above statements for the course are mapped in the table at the rear of the specification.

QAA Subject Benchmark Statements
The course is also mapped against the General and Specific learning outcomes in accordance with the QAA Subject Benchmark Statement for Construction, Property & Surveying (2008). These can be seen in the table at the rear of the specification.

Programme structure
The programme is delivered over two academic years and consists of 120 credits which must be studied and successfully completed to be awarded the qualification. In year one three 20 credit modules will be studied over two trimesters as follows:

CAS4012 Construction Core Skills
CAS4007 Construction Technology
CAS4008 Construction Law

In year two a further three 20 credit modules will be studied over two trimesters as follows:

CAS4009 Construction Surveying & Measurement
CAS4010 Construction Science & Materials
CAS4011 Integrated Project

Successful completion of the HNC Construction and Surveying, with an overall Merit grade, will allow progression into BSc (Hons) accredited degree programmes listed below.

BSc (Hons) – Architectural Technology
BSc (Hons) – Building Surveying
BSc (Hons) – Construction Management
BSc (Hons) – Quantity Surveying

Module Code	Module title	Core/ Option/ Elective (C/O/E)	Credits	Length (1, 2 or 3 periods)
CAS4001	Construction Core Skills	C	20	2
CAS4007	Construction Technology	C	20	2
CAS4008	Construction Law	C	20	2
CAS4009	Construction Surveying & Measurement	C	20	2
CAS4010	Construction Science & Materials	C	20	2
CAS4011	Integrated Project	C	20	2
Total Credits			120	

Learning and teaching strategies

The diverse nature of the programme permits the deployment of a variety of teaching and learning methods in order to ensure the acquisition and development of the appropriate concepts, knowledge and skills. Many of these will be experienced during formally timetabled classes whilst others will be appropriate to student centred learning.

Whilst there are significant opportunities to spend time with the tutors and technicians during timetabled classes, practical work and tutorials, there is an expectation that students will devote an appropriate amount of time to personal study. This personal study time might be spent, for example, engaging in general background reading, revisiting practical work, attending technical meetings and lectures provided by professional bodies, preparing for seminar activities, working on assignments or revising for examinations. During the early stages of studies, guidance will be provided on how students can make the best use of their personal study time. However, as students progress through the programme, this guidance will become less structured and prescriptive.

The learning and teaching methods described below are those most commonly adopted by the programme during the formally timetabled sessions. However, individual module tutors are free to introduce techniques that they view as especially suitable in aiding learning in their specialist area. (Each Module Guide will identify specific teaching and learning strategies).

Lectures: Lectures play an important part throughout the course and will feature in all

modules of the programme. They involve the dissemination of theoretical and empirical information by a lecturer and provide a basic framework that students can build upon through their reading and through other classroom activities. Guest Lectures by specialists from industry, the professional bodies and other academic institutions, enhance the learning experience.

Practical Sessions: Tutor-led practical sessions which can take place in laboratories, be field based or located in computer suites or studios, are a key aspect of this programme. These may comprise demonstrations by staff members, hands-on practical activities or project work. These activities help develop subject specific practical skills; specifically, the ability to: effectively deploy the methods and tools used in the development of a product, solve practical problems by making and testing prototypes; and make effective use of specialist software. During practical sessions, there is also an opportunity to develop time management and communications skills as well as the ability to work as part of a team.

Site Visits: provide the opportunity for students to view state-of-the-art projects. Such events also help to promote a synthesis between academic and professional based activities. Students can also relate their own employment with theory sessions in the University.

Seminars: Seminars involve groups of students who meet with a tutor to discuss further reading, issues and problems arising from lecture material, or to undertake case studies or problem-solving exercises. It is common for further reading on a particular topic to be assigned, and one student may be required to present an oral synopsis to provide a basis for discussion. Seminars play an important part in encouraging students to think critically about the subject, to analyse theory and information in a systematic fashion, and to enhance understanding of conceptual issues.

Workshops: Workshops are also employed in some modules and may involve the development of skills, e.g. research methods, the application of statistics, presentations etc, as well as problem solving through the evaluation of case-study material. Assistance with assignment work may be offered in workshops, and they play an important part in increasing students' confidence in dealing with the subject matter.

Tutorials: These are usually individually based but may be shared with students who are studying a similar area/issue. Students should prepare for tutorials, which are usually associated with an assignment, by bringing any plans for discussion.

Informal Group Study Sessions: Laptops can be booked out from the library issue desk

and used for group work in the Social Learning Zone. Furthermore, there are a number of group study rooms in the library which can also be booked for meetings and/or presentation practice.

Learning activities (KIS entry)

	Course Year						
	1	2	3	4	5	6	7
Scheduled learning and teaching activities	32%	34%	N/A				
Guided independent study	68%	66%	N/A				
Placement/study abroad	0%	0%	N/A				

Assessment strategy

The assessment strategy for the programme is designed to ensure that students achieve the overall aims and learning outcomes of the programme, as well as the learning outcomes for individual modules; they may take the form of assessment of individual performance during practical work, time constrained examinations, essays, making presentations, writing up of laboratory work, analytical or design assignments, research assignments, design submissions, personal development plans.

Assessments serve several functions. The obvious and primary function is to evaluate student achievement. However, assessment also serves to help students to organise and develop their learning.

Feedback from assessment serves an important educational function and can help develop skills and understanding of personal strengths and weaknesses. To this end, all modules will adopt "formative" assessment methods which will result in qualitative feedback and does not contribute to the mark for the module; this enables students to gain understanding and development of knowledge, skills and abilities that can then be applied to the "summative" assessment to provide the definitive mark for the module. Formative assessment strategies will take place in one or more of the following forms; presentations, group work, discussions based on case studies (e-forums), scenarios, or

tasks delivered by either face to face sessions or task delivered through the VLE (Quiz etc).

The various assessment methods deployed by the programme are described below.

Essay: For a number of modules, students will be required to produce a coursework essay or essays. Essays assess understanding of the thrust of the question set, whether students have introduced and appreciate the relevance of appropriate material to the topic in hand and understand its implications, whether they can analyse and evaluate information and whether they can communicate ideas clearly. Coursework essays are typically set to assess the learning outcomes related to understanding key concepts, demonstrating critical evaluations, and demonstrating the capacity to think independently. The required length of coursework essays can vary depending upon the purpose of the assignment for which the work is assessed. Students will be given guidance by the teaching staff on any specific requirements.

Reports: A number of modules require the student to write reports, which are sometimes based on a given case-study. These reports identify published background research and rationale for their study, the way in which the study was carried out, and the results and analysis of information. Usually, a standard format is used to aid clear, precise and unambiguous expression. Students are given explicit guidance on the format required for the report.

Presentations: Students are required to make oral presentations (e.g. from notes or from an essay, using presentational aids where appropriate) in a number of modules. Some modules may specify such a presentation as part of their assessment, whilst seminar presentations in other modules may not be part of the formal assessment. To augment the tutor's assessment; some modules will also make use of "peer review" where fellow students assess their peers against pre-determined assessment guidelines.

Project Work: Many modules make use of project work for assessment. Project work may be undertaken by individuals or groups of students working together. Project briefs may be set by the tutor, an external company or by students themselves, depending on the requirements of the module. Live project work is a key feature of this course, with many project briefs being set by external companies, addressing real-life problems and issues.

Practical Work: Individual performance is assessed during field-based practical work. Assessment guidelines are issued at the start of a module and these can include the assessment of motivational skills, theoretical knowledge, the ability to work in a group, communication skills as well as practical skills associated with carrying out a particular task. There is also an emphasis on the assessment of ability to perform the work safely in accordance with the appropriate risk assessment.

Time constrained assessments: Some modules make use of this form of assessment either in the form of a formal closed book written examination or a time constrained in class test.

The assessment methods for each module are identified in the Module Guides given out at the beginning of the teaching period. Furthermore, the Programme Handbook provides information on assignment submission dates in the "Assessment Timing Matrix" and this allows students to plan their work load effectively.

Assessment methods (KIS entry)

	Course Year						
	1	2	3	4	5	6	7
Written exams	17%	17%					
Coursework	83%	83%					
Practical exams	0%	0%					

Assessment regulations
- The programme uses the Assessment Regulations for the Undergraduate Modular Framework.

- The overall pass mark for all modules is 40 percent. The mark awarded will be made up, where specified, of the weighted average of the examination and coursework assessment marks.

- Normally, students will be expected to have achieved an overall module mark of 40 percent, with no item defined in the assessment pattern for the module having a mark below 35 percent, in order to be awarded the credit for a module.

- For the full and current version of the Assessment Regulations, refer to the document "*Assessment Regulations for Undergraduate Modular Programmes (Main Document)*" at the following university intranet site:
http://www.bolton.ac.uk/Quality/QAEContents/APPR/Home.aspx

Grade bands and classifications

Students are usually awarded both a mark and a grade for assessed work. Grades correspond to the following mark ranges.

Grade	*Mark (%)*	*Description*
Distinction	70 +	Work of exceptional quality
Merit	60 – 69	Work of good quality
Pass	40 – 59	Work of satisfactory quality
Borderline Fail	35 – 39	Work of unsatisfactory quality
Fail	0 – 39	Unsatisfactory performance

HNC Overall Qualification Grade

- Upon <u>successful</u> completion of the programme of study, students will be awarded the **HNC qualification with an overall "qualification grade"** i.e. **PASS, MERIT or DISTINCTION**, dependent upon their performance in the **best 80 credits** of the programme, as follows:

Points Available per Single Credit, at Specified Module Grades

Pass = 0   Merit = 1   Distinction = 2

HNC Qualification Grade

Points Range	Grade	
0 – 79	Pass	(**P**)
80 – 159	Merit	(**M**)
160	Distinction	(**D**)

Role of external examiners

External examiners are appointed for all programmes of study. They oversee the assessment process and their duties include: approving assessment tasks, reviewing assessment marks, attending assessment boards and reporting to the University on the assessment process.

Support for student learning

- The programme is managed by a programme leader
- Induction programme introduces the student to the University and their programme
- Each student has a personal tutor, responsible for support and guidance
- Personal Development Planning (PDP) integrated into all programmes
- Feedback on formative and summative assessments
- A Student Centre providing a one-stop shop for information and advice
- University support services include housing, counselling, financial advice, careers and a disability
- A Chaplaincy
- Library and IT services
- Student Liaison Officers attached to each Faculty
- The Students' Union advice services
- Faculty and Programme Handbooks which provide information about the programme and University regulations
- The opportunity to develop skills for employment
- English language support for International students

Methods for evaluating and enhancing the quality of learning opportunities
- Programme committees with student representation
- Module evaluations by students
- Students surveys, e.g. National Student Survey (NSS), Postgraduate Taught Experience Survey (PTES)
- Annual quality monitoring and action planning through Programme Quality Enhancement Plans (PQEPs), Data Analysis Report (DARs) Subject Annual Self Evaluation Report (SASERs), Faculty Quality Enhancement Plans (FQEPs), University Quality Enhancement Plan (UQEP)
- Peer review/observation of teaching
- Professional development programme for staff
- External examiner reports

Other sources of information
Student portal
http://www.bolton.ac.uk/Students/Home.aspx

Students Union
http://www.usbu.org.uk/

Faculty or similar Handbook
http://www.bolton.ac.uk/Students/Home.aspx

Programme Handbook (Link to be add link)

Student Entitlement Statement
http://www.bolton.ac.uk/Students/AdviceAndSupport/StudentsServices/

Module database
 http://www.bolton.ac.uk/academicaffairs/index.ttml

Moodle (for the programme link to be added link)

External examiners reports
http://www.bolton.ac.uk/Quality/QAEContents/ExternalExaminersReports/Home.aspx

Document control

Author(s)

Clive John Robinson

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Learning outcomes map

Module title	Mod Code	Status C/O/E	K1	K2	K3	K4	K5	K6	C1	C2	C3	C4	C5	C6	P1	P2	P3	P4	P5	P6	T1	T2	T3	T4	T5	T6
Level 4																										
Construction Core skills	CAS4001	C			DA				TD	DA	DA	TDA				D	DA	DA			TDA		DA		DA	TDA
Construction Technology	CAS4007	C	TDA	TD	TDA				TD	TD	TDA						D	DA			TDA	TDA	DA	DA	DA	DA
Construction Law	CAS4008	C		TDA	TDA					TD	TDA						D	DA			TDA	DA	DA		DA	DA
Construction Surveying & Measurement	CAS4009	C		TDA					TDA	D	TDA	TDA				DA	DA		TDA		DA	DA	DA			TDA
Construction Science & Materials	CAS4010	C		D	TDA				TD	D	D	TDA				DA	DA		TDA		DA	DA	DA			TDA
Integrated Project	CAS4011	C	DA	DA	DA	TDA			DA	DA	DA	DA			DA	DA	DA	DA			DA	DA	DA	DA	DA	DA

K. Knowledge and understanding   P. Practical, professional and subject specific skills C. Cognitive, Intellectual and thinking skills   T. Transferable, key or personal skills

Complete the grid using the following (Developed = D, Taught = T, Assessed = A)

Module title	Mod Code	New? ✓	Level	Credits	Type	Core/Option /Elective C/O/E	Pre-requisite module	Assessment 1			Assessment 2			Assessment 3		
								Assessment type	Assessment %	Add Y if final item	Assessment type	Assessment %	Add Y if final item	Assessment type	Assessment %	Add Y if final item
Construction Core skills	CAS4001	✓	HE4	20	Standard	C	None	CWK	50%		CWK	50%	Y			
Construction Technology	CAS4007	✓	HE4	20	Standard	C	None	CWK	50%		Exam	50%	Y			
Construction Law	CAS4008	✓	HE4	20	Standard	C	None	CWK	50%		CWK	50%	Y			
Construction Surveying & Measurement	CAS4009	✓	HE4	20	Standard	C	None	CWK	50%		CWK	50%	Y			
Construction Science & Materials	CAS4010	✓	HE4	20	Standard	C	None	CWK	50%		Exam	50%	Y			
Integrated Project	CAS4011	✓	HE4	20	Project	C	None	CWK	25%		CWK	75%	Y			

Bolton Key Core Curriculum requirements Module Title	Module Code	C/O/E	Employability											Bolton Values		
			PDP	Communication	Team work	Organisation & Planning	Numeracy	Problem solving	Flexibility & adaptability	Action planning	Self awareness	Initiative	Personal impact & confidence	Inter-nationalisation	Environmental sustainability	Social, public and ethical responsibility
Construction Core skills	CAS4001	C	TD	TDA	TD	TD	TDA	TDA	TD	TD	TD	TD	TD	TD		TD
Construction Technology	CAS4007	C		TDA		TDA	D	TD	TD	D	D	D	D	D	TD	TD
Construction Law	CAS4008	C		TDA				TDA	D	D	D	D	D	TDA	TDA	TDA
Construction Surveying & Measurement	CAS4009	C		TDA	TDA	TDA	TDA	TDA	D	D	TDA	TDA	TDA	D	D	TDA
Construction Science &Materials	CAS4010	C		DA	DA	DA	TDA	DA	D	D	DA	D	DA	D	TDA	D
Integrated Project	CAS4011	C	TD	TDA	TDA	TDA	DA	TA	D	TD	TD	D	DA	D	DA	DA

Complete the grid using the following (Developed = D, Taught = T, Assessed = A)

HNC Construction & Surveying

PROGRAMME LEARNING OUTCOMES
QAA Subject Benchmark Statement 2008 (Construction Property & Surveying)

<u>Key</u>
a = assessed
d = developed
t = taught

		Construction Core Skills	Construction Technology	Construction Law	Construction Surveying & Measurement	Construction Science & Materials	Integrated Project
	LEVEL HE4	CAS4001	CAS4007	CAS4008	CAS4009	CAS4010	CAS4011
Subject knowledge and understanding	Recognise the nature of the relevant specific discipline and its relationships within the context of the subject.	t/d	t/d	t/d	td		d/a
	Describe and apply a range of relevant key concepts, theories and principles.	t/d	t/d	t/d	td	t/d/a	
	Identify and recognise relevant issues and why they are important.	t/d	t/d/a	t/d/a		t/d/a	d/a
	Recognise and apply all relevant aspects of management and other specialism's within the context of regulatory requirements, the needs of society and ethical correctness.		t/d	t/d/a		d	d/a
	Select and apply ICT applications appropriate to the discipline.		t/d/a	t/d	td	d/a	d/a
	Present original ideas and reflections via a range of methods to convey appropriate standards of literacy and the use of numeric data.	t/d/a	t/d/a		tda	t/d	d/a
	Identify and explain the nature of the various working interactions and relationships in a professional context.	t/d/a	t/d/a	t/d/a	tda	d/a	

Subject-specific skills						
Survey, map and test specified characteristics of the natural and built environment.		d		tda	t/d/a	
Understand strategies and the requirements of environmental sustainability.		t/d/a			t/d/a	
Understand organisational strategies and processes in a relevant industry.	t/d/a	d	t/d/a		d	d/a
Identify project requirements and the processes for project development.		t/d/a		tda	t/d/a	d/a
Investigate factors affecting potential developments.		t/d	t/d/a		d	d/a
Understand the financial and cost factors affecting development projects.		d		td	t/d/a	d/a
Develop project designs and documentation.		t/d/a		tda	d	d/a
Understand procurement and contract processes.		d			d	d/a
Understand construction and installation operations.		d/a		d	t/d/a	d/a
Understand the processes for the control of work within projects.		d	t/d/a		t/d/a	d/a
Identify the reasons for disputes.		d			t/d/a	
Produce basic valuations of built assets.					d	

Contribute to the processing of property transactions and agreements .						
Plan and control the use and maintenance of property, systems and services.		d/a			t/d/a	
Investigate questions and problems of a routine nature and devise solutions.	t/d/a	d	t/d/a		d	d/a
Participate in teams in the context of effective professional practice.		d		td	t/d/a	d/a
Generic skills — Use methods for acquiring knowledge and apply appropriate research strategies and methods.	t/d	t/d	t/d		d/a	d/a
Gather and summarise information, cite evidence and make judgements about merits, contrast points of view and develop ensuing discussion, making judgements of a routine nature.	t/d/a	d	t/d/a		t/d/a	d/a
Understand interpersonal relationships and understand and apply leadership, teamwork and self-development.		d		tda	d/a	d/a
Demonstrate a basic understanding of the workings of business and other types of organisation.			t/d/a		d	
Summarise and use a range of appropriate means of communication, including information technology for a particular topic or audience.	t/d/a	t/d/a		tda	d/a	d/a
Make judgements of a routine nature.		d	t/d		d/a	d/a