



## Programme specification

*(Notes on how to complete this template are provide in Annexe 3)*

### 1. Overview/ factual information

<b>Programme/award title(s)</b>	BSc (Hons) Top-Up in Construction Engineering & Management
<b>Teaching Institution</b>	South West College
<b>Awarding Institution</b>	The Open University (OU)
<b>Date of first OU validation</b>	September 2019
<b>Date of latest OU (re)validation</b>	N/A
<b>Next revalidation</b>	March 2024
<b>Credit points for the award</b>	360 (120 Top-Up)
<b>UCAS Code</b>	N/A
<b>JACS Code</b>	K220
<b>Programme start date and cycle of starts if appropriate.</b>	September 2019
<b>Underpinning QAA subject benchmark(s)</b>	Land, Construction, Real Estate and Surveying, 2016
<b>Other external and internal reference points used to inform programme outcomes. For apprenticeships, the standard or framework against which it will be delivered.</b>	<ul style="list-style-type: none"> <li>• Draft Programme for Government;</li> <li>• Government Industrial Strategy – Economy 2030;</li> <li>• South West Colleges’ Development Plan;</li> <li>• QAA UK Quality Code for Higher Education, Part A;</li> <li>• Feedback from industry (Industrial Advisory Board) and student focus groups;</li> <li>• Chartered Institute Of Building (CIOB) Undergraduate Educational Framework, 2018.</li> </ul>
<b>Professional/statutory recognition</b>	Propose to request CIOB accreditation
<b>For apprenticeships fully or partially integrated Assessment.</b>	N/A
<b>Mode(s) of Study (PT, FT, DL, Mix of DL &amp; Face-to-Face) Apprenticeship</b>	PT, FT – Mix of DL & Face to Face

<b>Duration of the programme for each mode of study</b>	FT – 1 Years PT – 2 Years (2 Semesters per year)
<b>Dual accreditation (if applicable)</b>	N/A
<b>Date of production/revision of this specification</b>	March 2019

**Please note: This specification provides a concise summary of the main features of the programme and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if s/he takes full advantage of the learning opportunities that are provided.**

**More detailed information on the learning outcomes, content, and teaching, learning and assessment methods of each module can be found in student module guide(s) and the students' handbook.**

**The accuracy of the information contained in this document is reviewed by the University and may be verified by the Quality Assurance Agency for Higher Education.**

## **2.1 Educational aims and objectives**

This course has a sustainable industry focused approach to construction engineering and management, where graduates will develop an extensive range of professional subject knowledge and technical skills. This knowledge will equip students to work within the industry to help achieve a more sustainable, higher quality built environment.

The overall aim of the course is to provide a broadly based education in in this industry that prepares graduates either to follow a productive career as professionals/technicians in the Construction Engineering or Surveying industries or to proceed to a higher academic qualification. A Work-Based Learning component has been built into the programme to enhance the student's employability and effectiveness in the workplace.

In fulfilling this purpose the course aims to: Provide students with knowledge and understanding of the context, core concepts and theories relevant to Construction Management in the design, creation and maintenance of a sustainable built environment. (Focussing principally on UK construction but including an international perspective)

### **The BSc (Hons) Top-Up in Construction Engineering & Management seeks to:**

- Develop transferable skills which students will be able to apply both within an academic context and in their professional careers.
- Develop cognitive skills which students will be able to apply in reaching professional judgements, solving problems and making decisions within construction disciplines.

- Develop practical and technical skills relevant to Construction Engineering and Management, which students will be able to apply in an entrepreneurial and creative way in their professional careers.
- Foster an environment in which learning experiences are shared by students on various parallel construction-related courses, promoting good quality communication and the inter-disciplinary nature of the construction industry.
- Encourage self-motivation and independent thought, such that graduates will be confident in challenging established working practices and responding to the future needs of the construction industry and its associated professions.
- Promote a culture of intellectual enquiry such that graduates will recognise the importance of lifelong learning for both personal and professional development to become resilient professional leaders and engaged global citizens.
- Promote social, ethical and environmental awareness.

## 2.2 Relationship to other programmes and awards

(Where the award is part of a hierarchy of awards/programmes, this section describes the articulation between them, opportunities for progression upon completion of the programme, and arrangements for bridging modules or induction)

The College offers the following courses from which students may progress, after successful completion, to the BSc (Hons) Top-Up in Construction Engineering and Management. Entry may be at varying points depending on the level of qualification the student has attained;

FdSc in Construction Engineering & Management

FdSc in Construction Engineering with Surveying

FdSc in Architectural Technology

FdEng in Architectural Engineering (Building Services)

FdEng in Civil & Environmental Engineering

In general, across all of the campuses, there is significant volume of 'A' Level students attending Grammar and Secondary Schools that our courses have also attracted over the last number of years. This course will be very attractive to a large number of A Level students that currently travel out of the South West Region to undertake construction related undergraduate programmes.

Within this top-up degree programme there will be an exit award in-built;

Upon successful completion of 60 credits at Level 6 (totalling to 300 credits) students will have attained the exit award of Ordinary Degree (BSc);

Upon successful completion of all Level 6 modules, including the Dissertation module, students will have attained the award BSc (Hons).

Successful completion of this programme, to BSc Hons level and depending on level of achievement, will allow for articulation to a range of postgraduate courses through our local universities (Open University, Ulster University and Queens University Belfast) and universities across the UK and further afield.

**2.3 For Foundation Degrees, please list where the 60 credit work-related learning takes place. For apprenticeships an articulation of how the work based learning and academic content are organised with the award.**

Not applicable

**2.4 List of all exit awards**

Ordinary Degree (BSc) upon successful completion of 300 credits (60 credits at Level 6).

### 3. Programme structure and learning outcomes

#### Programme Structure - LEVEL 6

Compulsory modules	Credit points	Optional modules	Credit points	Is module compensatable?	Semester runs in
Designing Sustainable Buildings	20			Yes	1
Project Management & Professional Ethics	20			Yes	1
Collaborative Project	20			Yes	1
Building Design, Performance & Regulation	20			Yes	2
Research & Dissertation	40			No	2

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Intended learning outcomes at Level 6 are listed below:

<b><u>Learning Outcomes – LEVEL 6</u></b>	
<b>3A. Knowledge and understanding</b>	
<b>Learning outcomes:</b>	<b>Learning and teaching strategy/ assessment methods</b>
<p><b>A1</b> Critically analyse, from a variety of sources, the key concepts, theories, principles and processes involved in construction engineering and surveying.</p> <p><b>A2</b> Recognise and use appropriate techniques, methods, materials, product and practices, including the regulatory framework, codes and standards, employed in construction engineering and surveying.</p> <p><b>A3</b> Synthesise and summarise, through a critical evidence based approach, current issues within the context in which construction engineering operates including, the legal, social,</p>	<p><b>Learning and Teaching Methods:</b> Teaching and learning will include tutorials, academic workshops, virtual learning environment (VLE) integration, lectures, seminars, directed study, observations, presentations, peer feedback and plenary activities.</p> <p><b>Assessment Methods:</b> Learning outcomes will be addressed within the modules of the programme. Learners will have the opportunity to study, engage and apply their knowledge within assessments. They will be challenged to engage in academic discussion and will evaluate contemporary research, in each module,</p>

<b><u>Learning Outcomes – LEVEL 6</u></b>	
<b>3A. Knowledge and understanding</b>	
<p>economic, health and safety, cultural, technological, physical, environmental and global influences.</p> <p><b>A4</b> Apply knowledge and understanding of the key professional, legal, moral and ethical issues involved in construction engineering and surveying.</p>	<p>developing their knowledge and understanding. The application of this knowledge and understanding will be evident in the research aspect of assessments, where learners will apply theories and concepts to case studies and independent research tasks.</p> <p>Where applicable, learners will use industry standard equipment and software to apply their knowledge. Most modules have an applied element to them, allowing learners to use their knowledge and understanding and apply their practice in construction engineering, construction management and surveying. They will provide justification using an evidence-based approach to their design and delivery, through their underpinning knowledge of the construction industry and personal development. Knowledge and understanding will be monitored using formative assessment throughout the modules.</p> <p>Assessment strategies may include essays, reports, case studies, research reports, presentations, practical observations.</p>

<b>3B. Cognitive skills</b>	
<b>Learning outcomes:</b>	<b>Learning and teaching strategy/ assessment methods</b>
<p><b>B1</b> Interpret criteria and specifications and plan their implementation.</p> <p><b>B2</b> Synthesise and critically analyse and solve a range of construction problems using appropriate techniques and principles from a range of sources.</p> <p><b>B3</b> Through research activities, make well considered decisions in complex and unpredictable scenarios relating to risks or safety concerns involved in the construction process.</p> <p><b>B4</b> Understand the importance of academic and professional integrity.</p>	<p><b>Learning and Teaching Methods:</b></p> <p>Learners will be challenged to develop their cognitive skills by developing arguments and hypotheses based upon their research. They will explore various topics and be challenged to develop a critical analysis of their findings in areas of construction engineering/management and surveying. Teaching and learning will include tutorials, academic workshops, VLE integration, lectures, seminars, directed study, observations, presentations, peer feedback and plenary activities.</p> <p><b>Assessment Methods</b></p> <p>Learners will be assessed on their ability to critique and evaluate research. They will develop their knowledge through the use of independent thinking skills and produce recommendations based upon their knowledge which is justified through supported literature.</p>



3B. Cognitive skills	

3C. Practical and professional skills	
Learning outcomes:	Learning and teaching strategy/ assessment methods
<p><b>C1</b> Plan, allocate and evaluate individual and collaborative project work using relevant test and measurement apparatus and related industry standard software.</p> <p><b>C2</b> Devise, plan and undertake practical/field work, laboratory or other investigations in a responsible manner, paying due diligence to ethical and data protection issues.</p> <p><b>C3</b> Appraise environmental, legal and commercial constraints in the construction process.</p> <p><b>C4</b> Apply, competently, appropriate construction management techniques (including aspects of BIM) to specific problems.</p>	<p><b>Learning and Teaching Methods:</b> Teaching and learning may include tutorials, academic workshops, VLE integration, lectures, seminars, directed study, observations, presentations, peer feedback and plenary activities.</p> <p><b>Assessment Methods:</b> Learners will have the opportunity to use modern, industry standard equipment in order to apply their knowledge and also develop the skills required for employment. The nature of the programme requires learners to become independent in their ability to study and develop. The research tasks in modules and the research project module requires learners to apply decision making skills and justification of these decisions based upon their knowledge and understanding.</p>

3C. Practical and professional skills	

<b>3D. Key/transferable skills</b>	
<b>Learning outcomes:</b>	<b>Learning and teaching strategy/ assessment methods</b>
<p><b>D1</b> Demonstrate digital literacy and communication skills in a range of contexts suitable for employment in Construction Engineering and Surveying.</p> <p><b>D2</b> Demonstrate competence in the use of electronic information handling and data processing through effective use of Digital Information Systems e.g. BIM and/or GIS.</p> <p><b>D3</b> Demonstrate numeracy skills to synthesise, analyse and interpret data to test a hypothesis or proposition.</p> <p><b>D4</b> Develop the skills necessary to work independently, manage own personal learning and development, manage time effectively and for personal organisation and continuing professional and educational development.</p>	<p><b>Learning and Teaching Methods:</b> Teaching and learning will include tutorials, academic workshops, VLE integration, lectures, seminars, directed study, observations, presentations, peer feedback and plenary activities.</p> <p><b>Assessment Methods:</b> Learners will develop their key transferable skills through the development of their knowledge of data analysis where they will enhance their understanding of statistical assessments. Throughout the programme learners will develop digital literacy with the completion of assessments and presentations using suitable methods. There will be a range of assessment methods to allow learners to develop their communication skills in different ways, both written and oral. The need to act independently is very much evident in the research of literature and development of projects within the modules delivered.</p>

**Exit Award – Ordinary Degree (BSc) in Construction Engineering & Management upon successful completion of 60 credits at Level 6.**



#### 4. Distinctive features of the programme structure

- **Where applicable, this section provides details on distinctive features such as:**
  - where in the structure above a professional/placement year fits in and how it may affect progression
  - any restrictions regarding the availability of elective modules
  - where in the programme structure students must make a choice of pathway/route
- **Additional considerations for apprenticeships:**
  - how the delivery of the academic award fits in with the wider apprenticeship
  - the integration of the 'on the job' and 'off the job' training
  - how the academic award fits within the assessment of the apprenticeship

- This programme of study will offer clear routes that facilitate opportunities for successful progression from Foundation Degrees in related areas to **BSc (Hons) Construction Engineering & Management**. South West College will be the first regional college in Northern Ireland to provide this level of qualification in collaboration with the Open University and provide learners with a range of full time and part time study modes that are accessible within the South West Region.
- A programme with multiple exit points.
- The BSc (Hons) Construction Engineering & Management is subject to high levels of employer engagement, via the Industrial Advisory Board, in areas such as curriculum and module design. Employer engagement will be encouraged throughout the programme in curriculum development, evaluation and self-sourced placements on an ongoing basis.
- Innovative technology such as Virtual/Augmented Reality, 3D Geospatial Scanning, Drones, Robotic Surveying Equipment, Hydraulic Flume, 3D Printing, Etc. will be used to enhance learning.
- Learners will engage in Personal and Professional Development (PPD) and Work-Related Learning.
- Access to a range of Innovation Centres and dedicated staff to aid project based learning and research.
- Strong teaching team in terms of variety of industry experience, academic and professional qualifications supporting high quality teaching and learning.

## 5. Support for students and their learning.

*(For apprenticeships this should include details of how student learning is supported in the work place)*

### **Learners and their learning are supported in a number of ways:**

**Induction sessions** provide timely advice on the key aspects of the course and services provided by the college. These are for learners in their first year and are delivered by members of staff from the course teams and the college learner support staff. It welcomes learners to the college, gives detailed information on college structure, staff contact information, teaching and learning resources, health and safety and learner support services and details on the college environment. It also provides advice concerning assessment and how to approach study in higher education.

**A course handbook** provides all the necessary information about the course. It includes information on the teaching staff, outline information on modules studied and the course calendar. It contains the course specification and the current course regulations.

**Module handbooks** describe the content of each module delivered in a particular year. These provide learners with the module teaching and assessment schedules and a list of the recommended texts.

**Learning resources** at SWC are available to support the learner. The VLE is used to enable learners to access resources from lectures plus additional reading, resources and activities in their own private study time. They are directed to on-line resources for research as well as e-books through SWC LRC catalogue. Turnitin plagiarism software is utilised so that they can improve their referencing skills. There are also opportunities for blogs, forums, collaborative and peer learning and support through the VLE which are used to ensure both equality of learning experiences and opportunities for further challenge and research supplementary to the main delivery in the classroom. Regular discussions and support sessions through software (Skype, Collaborate) are provided by teaching staff for part-time learners.

**A course tutor/studies advisor** for the course year provides a single first point of reference for both new and continuing learners. The course tutor/studies advisor is an experienced member of staff with the responsibility of assisting learners in their personal and career development.

**A counselling service** is available to learners who are experiencing problems with aspects of their lives other than the strictly academic. However, if these problems are affecting their studies or academic progress the course tutor/studies advisor and appropriate members of the course team co-operate to provide recommended help and advice to the learner

concerned. This service is provided by an external independent counsellor and the Learner Support Officer at South West College.

Strong linkage with learner services in relation to health and welfare, finance, guidance and counselling, careers and special needs.

**A careers service** is also available for learners to help them in determining their future career and supporting their applications for employment. Learners will discuss career options during meetings with their class tutor/studies advisor. The student/staff consultative committee gives learners the opportunity to raise and discuss general course concerns.

Learners have access to the college library facilities, staff and to IT support staff. Learners are provided with e-mail accounts and have full access to the Internet.

Learners will also have access to lecturer support through e-mail and the College VLE and google classroom.

**Pastoral care** on the BSc (Hons) Top-Up in Construction Engineering & Management programme is based on a personal tutor system. Each learner on the course is assigned to a personal tutor who is a member of the course team and takes a dedicated interest in one of the year groups on a course and acts as an intermediary between the year group and the course director. With larger year groups there may be more than one personal tutor.

**Research/Study Skills** – students will be required to undertake an initial induction module that will outline research methods and study skills. Students will also develop research skills and study skills through the undertaking of a number of modules prior to the ‘Research & Dissertation’ module.

## 6. Criteria for admission

*(For apprenticeships this should include details of how the criteria will be used with employers who will be recruiting apprentices.)*

### Entry point - Year 3:

#### Students who wish to gain admission to the BSc (Hons) Top- Up

Entry to the BSc Honours Top-Up programme requires applicants to have successfully completed a Foundation Degree (or other relevant Level 5 qualification such as a Higher National Diploma) in a Construction related discipline, qualifications deemed equivalent or by the college’s policy relating to APEL. Students must also hold GCSE English Language and Maths at grade 4 (grade C) or above (Level 2 literacy and numeracy qualifications are also accepted).

#### International Students

An international student is defined as a student who requires a Tier 4 (student) visa in order to study in the UK. Such applicants may or may not be living overseas at the time of making their course application. International applicants should apply via the usual route for full-time undergraduates. All International students must meet the college general entry requirements and academic qualifications requirements of the course. In addition, International students must have the required level of English Language IELTS academic 5.5- 6.0.

All international qualifications will be checked for academic comparability using the online UKNaric qualifications database. The Admissions team has access to UKNaric training materials and guidance on the evaluation and verification of international qualifications.

**Students may gain admission through Recognised Prior Learning.**

RPL is the process by which the college can identify, assess and certify an applicant's past educational and vocational achievements. Applicants wishing to be considered for APL for a particular program for the purpose of admission or credit must bring this to the attention of the course director at the application and interview stage. Applicants wishing to be considered for direct entry into a level above for or five would normally only be credited a maximum of 240 credits. Gaining credit at level 6 does not qualify.

APEL is where applicants can gain admission to a program on the basis of their experiential learning. At the application stage applicants should inform the admissions staff and the relevant course director of their intention to apply for APEL. APEL can only be used for admission purposes and not to gain credit or exemptions.

All applicants will be interviewed to assess their suitability for this programme of study.

**7. Language of study**

English

**8. Information about non-OU standard assessment regulations (including PSRB requirements)**

Not applicable.

**9. For apprenticeships in England End Point Assessment (EPA).**

*(Summary of the approved assessment plan and how the academic award fits within this and the EPA)*

Not applicable.

**10. Methods for evaluating and improving the quality and standards of teaching and learning.**

All HE programmes at SWC are subject to the Quality Management and Enhancement processes. In line with FHEQ Benchmark Statements (2014) the following processes are in place:

- Internal verification/moderation, cross marking and external examining processes used to ensure validity and reliability of assessment process.
- The Course Committee considers learner feedback from each module.
- Staff/Student Consultative Committee meetings provide the means of highlighting any difficulties, relating to the course, experienced by the cohort.



- Annual Course Review procedures consider quantitative and qualitative feedback and formulate action plans.
- Learners complete a module evaluation at the end of each module, each semester/year and at the end of the programme.
- Staff appraisal is carried out on a two-year cycle with attention given to the development needs of the individual staff member.
- The College will annually complete the OU course review & evaluation documentation if applicable.
- The College has a Staff Development Programme, which facilitates specific training/development for staff.
- All staff are encouraged to complete Information & Learning Technology qualifications.
- Views of external examiners are considered and SWC/OU reporting mechanisms are/will be followed.
- Informal views and formal written feedback is considered from Employers via the Industrial Advisory Board.
- Learner performance data and career progression is annually monitored.
- Peer observation and assessment has been introduced to assessment matrix.

All team members have to attend programme specific team meetings during the year, all with pre-set agendas, and the Course Directors have to attend Higher Education Committee Meetings, which consider quality management. All new staff to the programme are supplied with a dedicated mentor and a full induction, with extra supervision over their first year in many forms such as Teaching & Learning Mentors and additional peer observations.

#### **11. Changes made to the programme since last (re)validation**

Validation of new programme.

Annexe 1: Curriculum map.

Annexe 2: Curriculum mapping against the apprenticeship standard or framework (delete if not required).

Annexe 3: Notes on completing the OU programme specification template.

### Annexe 1 - Curriculum map

This table indicates which study units assume responsibility for delivering (shaded) and assessing (✓) particular programme learning outcomes.

Level	Study module/unit	Programme outcomes																			
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
6	Sustainable Construction Methods	✓	✓	Shaded	✓	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded
	Project Management & Professional Ethics	✓	Shaded		✓	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded
	Collaborative Project	Shaded	✓		✓	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded
	Building Design, Performance & Regulation	✓	Shaded	✓		Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded
	Research & Dissertation	✓	✓	✓		Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded



### Annexe 2: Notes on completing programme specification templates

- 1 – This programme specification should be mapped against the learning outcomes detailed in module specifications.
- 2 – The expectations regarding student achievement and attributes described by the learning outcome in section 3 must be appropriate to the level of the award within the **QAA frameworks for HE qualifications**: <http://www.qaa.ac.uk/AssuringStandardsAndQuality/Pages/default.aspx>
- 3 – Learning outcomes must also reflect the detailed statements of graduate attributes set out in **QAA subject benchmark statements** that are relevant to the programme/award: <http://www.qaa.ac.uk/AssuringStandardsAndQuality/subject-guidance/Pages/Subject-benchmark-statements.aspx>
- 4 – In section 3, the learning and teaching methods deployed should enable the achievement of the full range of intended learning outcomes. Similarly, the choice of assessment methods in section 3 should enable students to demonstrate the achievement of related learning outcomes. Overall, assessment should cover the full range of learning outcomes.
- 5 – Where the programme contains validated **exit awards** (e.g. CertHE, DipHE, PGDip), learning outcomes must be clearly specified for each award.
- 6 – For programmes with distinctive study **routes or pathways** the specific rationale and learning outcomes for each route must be provided.

7 – Validated programmes delivered in **languages other than English** must have programme specifications both in English and the language of delivery.